

01204421 Computer Networks

2nd Semester 2013 (Nov 2013 – Mar 2014)

Instructor Information

Instructor: Asso.Prof. Anan Phonphoem, Ph.D. (อศ.ดร.อนันต์ ผลเพิ่ม)

Office: Building 15, Room #407 and #710 (Iwing Lab)

Office Hours: Monday 11:00 – 12:30 (Walk-In) or by appointment (See Schedule)

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Research Lab: Intelligent Wireless Network Group (IHING) <http://iwing.cpe.ku.ac.th>

Course Information

Lecture: Thu 9:00 – 12:00, Building 15, Room E203

Class URL: <http://www.cpe.ku.ac.th/~anan/>

Prerequisite: -

Course Description: Internet Protocol version 4 and 6; ICMP and IGMP; Multicast; Classless Interdomain Routing; Routing Algorithm (RIP, OSPF, IS-IS, and BGP); transport Protocol (TCP and UDP); Multiprotocol Label Switching (MPLS); Application Protocols; Network Management and Security

Course Objective: Students become familiar with Computer Network concepts and terminologies for current and coming technologies. Students should understand the network characteristics and implementation.

Text Book: “**TCP/IP Protocol Suit**,” Behrouz A.Fourouzan, Mc Graw-Hill, 3rd Edition, ISBN 0-07-111583-8

Supplement: “**Computer Networks, A System Approach**”, Larry Peterson and Bruce S. Davie, Morgan Kaufmann, 4th Edition, 2007, ISBN 0-12-374013-4
“**The Internet and Its Protocols**”, Adrian Farrel, Morgan Kaufmann, 2004, ISBN 1-55860-913-X

Grades

Midterm exam: 42.5 %

Final exam: 42.5 %

HW assignment and/or Project: 15 % (this is a tentative percentage, subject to change)

Attendance: **If** ((Attendance Score \geq **0.90**) **and** (You are the **1st rank** for the particular grade))
Then (one stop adjustment automatically) /* e.g. “C+” becomes “B” */

Attendance Score

Description	Score (0 – 1)
0 – 15 min	1
15.01 – 100 min	$(100 - \text{MinLate})/100$
> 100 min	0
If missing class	
• with “letter of leave of absence in advanced”	0.5
• without “letter of leave of absence in advanced”	0

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).
- Make-up exam will only be provided for restrict circumstances such as severe illness.
- You are not allowed to take a midterm exam if you miss more than 2 lectures and also not allowed to take final exam if you miss more than 4 lectures.

Assignment Policy

- All hard-copy assignments must be handed in at the beginning of the class (> 15 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	Date	Description
1	Nov 7, 2013	Course orientation; Data Communication Review (Protocols; Addressing; Layering Concept)
2	Nov 14, 2013	Internet Protocol (IPv4) I; Addressing
3	Nov 21, 2013	Internet Protocol (IPv4) II; Supporting Protocol (ARP, ICMP)
4	Nov 28, 2013	Internet Protocol (IPv4) III; NAT, DHCP
	Dec 5, 2013	H.M. The King's Birth Day
5		Multicast; Addressing; IGMP
6	Dec 12, 2013	IPv6; Addressing; IPv4 and IPv6 Comparison
7	Dec 19, 2013	CIDR, VLSM
	Fri, Dec, 27 2013 4:00 – 7:00 PM	Midterm Exam
8	Jan 2, 2014	Routing Protocol I; Routing concept, RIP and OSPF
9	Jan 9, 2014	Routing Protocol II; IS-IS; BGP; Multicast Routing
10	Jan 16, 2014	Transport Protocol; UDP and TCP
11	Jan 23, 2014	Multiprotocol Label Switching (MPLS)
	Jan 30, 2014	No Class (WUNCA 27th Conference) (29-31Jan 2014)
	Feb 6, 2014	No Class (Kaset Fair, Feb 1 – 8, 2014)
12	Feb 13, 2014	Application Protocol I ; Concept, DNS
13	Feb 20, 2014	Application Protocol II ; Telnet, FTP, SMTP
14	Feb 27, 2014	Network Management; Security ; Ipsec Virtual Private Network ;
	Fri, Mar 7, 2014 1:00 – 4:00 PM	Final Exam