



HANYANG UNIVERSITY

Hanyang International Summer School

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Course Information	Class No.		18081	Course Code	ENE4019	Credits	3
	Course Name		Introduction to Computer Networks				
	Lecture Schedule		Tue-Fri / 9:00 AM - 12:00 PM				
	Course Description		This course introduces the fundamentals of network (Internet) architectures and methods. Our emphasis is placed on how the Internet works in general.				
	Course Objective		Introducing the fundamentals of network (Internet) architectures and methods: - fundamental concepts of networking and how they apply to the Internet - hands on experience with networking protocols and analysis techniques - how the Internet or DC are connected in general - up-to-date research issues (e.g., Data Center, Internet measurement)				
	Prerequisite		None				
	Materials/Textbooks		Course materials will be given in class				
Evaluation	Attendance		10 %	Quiz		%	
	Assignment		20 %	Mid-term Exam		20 %	
	Presentation		%	Final Exam		40 %	
	Group Project		%	Participation		10 %	
	Etc.		Evaluation Item			Ratio	
			Midterm (Take Home Assignment)			20 %	
			Final Exam			40 %	
Daily Lecture Plan	Week 1	Day 1	Introduction to networks: protocol, layering				
		Day 2	Introduction to networks: ISPs, Internet architecture				
		Day 3	Application layer: Principles (RTT, Delay, Bandwidth), HTTP				
		Day 4	Application layer: DNS, and other popular protocols				
	Week 2	Day 1	Transport layer: socket, TCP, UDP				
		Day 2	Transport layer: Reliable Data Transfer design I				
		Day 3	Transport layer: Reliable Data Transfer design II				



		Day 4	Congestion control mechanism
	Week 3	Day 1	Networking layer: Internet Protocol I
		Day 2	Networking layer: Internet Protocol II
		Day 3	Internet routing algorithms
		Day 4	Research topics overview (paper review)
	Week 4	Day 1	Data Link layer: Multiple access protocol
		Day 2	Data Link layer: Ethernet
		Day 3	Final Exam
		Day 4	Graduation (NO class)