HANYANG UNIVERSITY

Hanyang International Summer School

Faculty Information	**Name**	Youngjoon Won				
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Course Information	**Class No.**	TBA	**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)