2019. 6. 19. my KNU(1)

## 강의계획서

검색조건 :	
교양/교직/군사학	•
첨성인기초 - 독서와토론	•
[수업시간][건물 및 교과구분 코드][검색]	조회

[한글강의계획서보기]

## [Syllabus]

#### Course Outline

This is an introductory course on computer networks. This course introduces the concepts and basic principles of computer networks with focus on the Internet's architecture and protocols. The objective of this course is to understand layers of computer networks, understand functions and protocols of layers, and understand how the Internet works.

Topics to be covered include: overview of computer network architectures, applications, socket programming, transport I ayer, network layer, data link layer protocols, wired/wireless LANs, and mobile networks. Also, to understand network configuration and operation, practice networking labs using the Cisco Packet Tracer.

#### Core Competencies

Innovativeness		Reflection		Character	
Creativity	Convergence	Critical Thinking	Exploration	Communication	Responsibility

#### Course Objectives

Competencies	Course Objectives	Representative Competence
Creativity	Creative questioning, Problem solving, Imagination, Experimental at titude/approach	

Prerequisites

Data communication, computer architecture, C/C++-programming etc.

Recommended Subsequent Courses

Data structure, Operating system

syllabus.knu.ac.kr 1/4

2019. 6. 19. my KNU(1)

Gradina	Scale	(100%)

Attendance	Midterm Exam	Final Exam	Assignment	Presentation	Discussion	Others
5%	35%	35%	20%	0%	5%	0%

#### **Evaluation Methods**

- Evaluation:

. Midterm Exam: 35% . Final Exam: 35%

. Homework & Term projects: 25%

. Attendance: 5%

- Prerequisite Courses:

. Data communication, computer architecture, C/C++-programming etc.

Textbook and Other References

- Text book: Computer Networking A Top-down Approach, Kurose and Ross, Pearson, 7th Ed., 2017

#### Notice to Students

- Lecture notes will be distributed via the web site (http://abeek.knu.ac.kr/index.jsp).
- All homeworks should be submitted by on-line.

### Support Available for Disabled Students

- 가. 청각장애 학생 : 앞자리 지정석, 긴급 전달사항은 메모활용 등
- 나. 지체장애 학생 : 시험시간연장 등
- 다. 시각장애 학생 : 시험지 확대복사제공 등
- 라. 기타 장애정도에 따라 필요한 사안이 발생시 최대한 편의 제공함

## [ Course Content and Schedule ]

no	Unit Goals and Learning Content	Teaching Methods	Assignments and Research Questions	비고
1	Week 1: Computer Networks and the Internet Internet architecture Packet-switched networks Layer architecture and protocols Internet history			
2	Week 2: Application Layer Protocols (1) . Web and HTTP . FTP			
3	Week 3: Application Layer Protocols (2) . Electronic mail: SMTP, POP3, IMAP			

syllabus.knu.ac.kr 2/4

9. 6.	. 19.	my KNU(1)	
	. DNS		
4	Week 4: Socket Programming . Socket calls for connectionles mode . Socket calls for connection-oriented mode		
5	Week 5: Transport Layer (1) . Connectionless Transport: UDP . Reliable data transfer: ARQ protocols		
6	Week 6: Transport Layer (2) . Connection-oriented Transport: TCP . TCP congestion control		
7	Week 7: Network Layer (1) . Virtual circuit and datagram networks . Internet Protocols: IPv4, DHCP, ICMP, IPv6		
8	Week 8: (Mid-term Exam.)		
9	Week 9: Network Layer (2) . Routing algorithms: link-state vs. distance vector . Internet routing protocols: RIP, OSPF, BGP . Multicast routing		
10	Week 10: Link Layer (1) . Error detection techniques . Multiple access protocols: ALOHA, CSMA, CSMA/CD, To ken passing		
11	Week 11: Link Layer (2) . Ethernet . Ethernet switch		
12	Week 12: Networking Practice Labs . Practice Labs using the Cisco Packet Tracer		
13	Week 13: Wireless Networks . Wireless LANs: IEEE 802.11(WiFi), Bluetooth . Cellular Internet access		
14	Week 14: Mobility Management . Mobile IP . Mobility Management in cellular networks		
15	Week 15: (Final Exam.)		

# [ Course Evaluation ]

Categories	Questions	Note
Self-	1.I participated actively in the course.	
Rating	2.I have made a lot of effort while taking the course.	
Standard	3. The course syllabus contained the detailed information about the operation of the course.	
Questions	4. The professor ran the course according to the course syllabus.	
	5. The professor clearly stated the course plan in the first class.	
	6. The professor stated objectives of each lecture clearly and explicitly.	
	7. The professor stimulated my interest in the field.	
	8. The professor had expertise on the course contents.	
	9. The professor delivered the class contents adapting to student abilities and learning levels.	
	10. The professor used various teaching methods considering course contents.	
	11. The professor encouraged students to ask questions, and responded properly.	

syllabus.knu.ac.kr 3/4

2019. 6. 19. my KNU(1)

		12. The professor gave assignments to deepen the course contents.	
		13. The professor provided meaningful and timely feedback on the students performances.	
		14.Overall, I would like to recommend this lecture to other students.	
		15.The course helped me to develop [the representative competency].	
	0 1: 1	I-1. The professor explained the course contents well.	
Optional Questions	I-2. The professor gave a lecture in adjusting the intensity and tone of voice to deliver the course		
	contents effectively.		

Cheating, plagiarism, and other dishonest practices will be punished as harshly as Kyungpook National University policies allow. The University specifies that cheating is grounds for dismissal. Penalties less severe may be imposed instead. A list of possible disciplinary actions is given below. Actions by the university:

- Failure in course
- Suspension from university for a designated period
- Expulsion from university

syllabus.knu.ac.kr 4/4