

Syllabus [2025Year 2 Term]

Course Information

Course Title	Mobile Communications	Credits	3
Course Code	525670-1	Required/Elective (For Undergraduate Courses)	Selective majors
Department or Major	Department of Mobile Systems Engineering	Language	English
Methods of Teaching		Lecture Room	월4,5,6/ 화10,11,12(국제608)
Time Allotment	Lecture(3) Experiments(0) Trainging & Practice(0) Performance(0) Designing & Planning(0)	Cyber Lectures	
Course Type	offline		
Cyber Lectures Preview			

Lecturer

Lecturer	Name	Suhan Choi	Rank	Professor	Final Academic Degree	공학박사
	Department & college	Department of Mobile Systems Engineering		Office	International Hall 601	
	Office Phone Number	031-8005-3243		e-mail	suhanc@dankook.ac.kr	
	Field of Interest					

Course Summary

Course Description	<p>In this course, students will learn introduction to wireless and mobile communication systems. This course, mobile communications is the first part of mobile communication systems course. Computer networks will be taught in the coming fall semester.</p> <p>The following topic will be discussed in this course:</p> <ul style="list-style-type: none"> - Overview of wireless cellular networks, - Mobile Radio Propagation, - Channel Coding and Error Control, - Cellular Concept, - Multiple Radio Access and Protocols, - Multiple Division Techniques for Traffic Channels, - Traffic Channel Allocation.
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Description Related Courses	This course is related to the following courses. – Computer Networks – Probability and Statistics – Multimedia Signal Processing – Eng. Math 1 & 2
Course Goals	– Students will understand basics of wireless and mobile communication systems. – Students will understand mobile radio propagation. – Students will understand channel coding and error control. – Students will understand cellular concept. – Students will understand mobile radio access. – Students will understand multiple division techniques. – Students will understand network protocols.
Projected Results	– Students can understand basics of wireless and mobile communication systems. – Students can understand mobile radio propagation. – Students can understand channel coding and error control. – Students can understand cellular concept. – Students can understand mobile radio access. – Students can understand multiple division techniques. – Students can understand network protocols.
Percentage of the original language classes(%)	100%
Cyber Lectures Preview	

Syllabus

Times	Lecture Topic	Lecture Goals	Lecture Methods	Assignments
1	Course Syllabus 1. Introduction	Introduction to the course	강의,	
2	1. Introduction		강의,	
3	1. Introduction		강의,	
4	3. Mobile Radio Propagation		강의,	
5	3. Mobile Radio Propagation		강의,	
6	3. Mobile Radio Propagation		강의,	
7	4. Channel Coding and Error Control		강의,	
8	Midterm Exam			
9	4. Channel Coding and Error Control		강의,	
10	5. Cellular Concept		강의,	
11	5. Cellular Concept		강의,	
12	6. Multiple Radio Access		강의,	
13	6. Multiple Radio Access		강의,	
14	7. Multiple Division Techniques for Traffic Channels		강의,	

Times	Lecture Topic	Lecture Goals	Lecture Methods	Assignments
15	Final Exam			

Methods of Grading

sequence	Description	Percentage	Details
1	Mid-tem Exam	45%	
2	Final-exam	45%	
3	Pop Quizzes	0%	
4	Assignments	0%	
5	Reports	0%	
6	Presentations & Discussions	0%	
7	Attendance	10%	
8		0%	
9	Others	0%	
All		100%	

Core of Value

핵심가치	전공역량	역량정의	역량구분	값(%)
혁신 (Discovery)	창의적문제해결 (Creative problem-solving)	주어진 상황과 문제를 창의적으로 해결할 수 있는 능력	부역량	0%
혁신 (Discovery)	도전 (Challenging)	전공 지식을 새로운 분야와 융합하고 아우를 수 있는 능력		0%
혁신 (Discovery)	지식융합 (Knowledge convergence)	새로운 분야를 개척하거나 도전적으로 임할 수 있는 능력	부역량	0%
헌신 (Dedication)	세계시민 (Universal value)	세계 공동체 구성원으로 전공자로서 국제적 이슈에 대응할 수 있는 능력		0%
헌신 (Dedication)	상호협력 (Cooperation)	공동의 목적 달성을 위해 타인과 상호협력할 수 있는 능력		0%
헌신 (Dedication)	공동체 (Sense of community)	공동체의 구성원으로서 필요한 태도와 윤리의식을 가질 수 있는 능력		0%
능동 (self-Determination)	자기주도 (Self-Managing)	주어진 상황과 문제를 주도적이고 능동적으로 해결할 수 있는 능력		0%

핵심가치	전공역량	역량정의	역량구분	값(%)
능동 (self-Determination)	지식활용 (Knowledge application)	주어진 상황과 문제에 대해 논리적으로 파악하고 분석할 수 있는 능력	주역량	0%
능동 (self-Determination)	논리적사고 (Logical thinking)	전공관련 지식을 필요에 따라 다양하게 적용하고 활용할 수 있는 능력		0%
능동 (self-Determination)	의사소통 (Articulation)	대화를 통해 다양한 의견을 조율하고 합의를 이끌어 낼 수 있는 능력		0%

Textbook(s) & References

Description	Title	Author	Publisher
Required Textbook	Introduction to Wireless & Mobile Systems (3rd Edition)	Dharma Prakash Agrawal, Qing-An Zeng	Cengage Learning
References	Data Communications and Networking (5th Ed.)	Forouzan	McGrawHill

Memo

※ Office Hours:
- Pre-appointment through emails, messages or phone calls