

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Level 1 Korean 2	Course Number	0000552001
Major / School Year	Dept. of Korean Language & Literature / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of Korean Language & Literature / 송원용	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[15-120:화(7-8A),목(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

Korean Class for the beginners who have never studied or studied less than 100 hours.
We will provide placement session for every beginner students in the first week of the semester.

[2] Course Learning Outcomes

Learn how to communicate in daily situation in Korean.

[3] Class Delivery Method

All time face to face class with textbook and Kahoot app. There will be lots of the interactions between your classmates during my classes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
10 %	10 %	0 %	30 %	20 %	10 %	10 %	10 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	20 %	10 %	50 %	20 %

[4] Grading Policies

Quiz scores after every units: 50%
Oral test as a final test: 10%
Attendance: 20%(minus 2 points for one absence without any notice)
Assignment: 5 points per one role playing video clip

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Language Institute of SNU	Publisher	Seoul National University press	Textbook	I love Korean 1	Issued year	2019
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation & Introduction
Second week	Unit 1. Learning Hangeul (1), (2)
Third week	Unit 2. Learning Hangeul (3), Classroom Korean and Greetings
Fourth week	Review of Unit 1, 2
Fifth week	Unit 3-1. I'm American
Sixth week	Unit 3-2. Ting-Ting, are you a student?
Seventh week	Unit 4-1. What is this?
Eighth week	Unit 3-3. Restaurant (3) Unit 4-1. Shopping (1)
Ninth week	Unit 5-1. Please, give me some orange juice.
Tenth week	Unit 5-2. Please, give me bibimbab and a bottle of cola.
Eleventh week	Unit 6-1. What are you doing?
Twelfth week	Unit 6-2. Where are you going?
Thirteenth week	Unit 7-1. What tastes delicious?
Fourteenth week	Unit 7-2. How much is it?
Fifteenth week	Unit 8-1. What time is it? / Final interview test
Sixteenth week	make-up class

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Level 1 Korean 2	Course Number	0000552002
Major / School Year	Dept. of Korean Language & Literature / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of Korean Language & Literature / 채숙희	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[15-503:화(5B-6),목(5B-6)]
Office hours			

[1] Outline / Purpose

Korean class for the beginners who can read and write Korean Alphabet

[2] Course Learning Outcomes

At the end of this course students will be able to:

- Develop basic Korean communication skills
- Use essential vocabulary, grammar and expressions for everyday situations

[3] Class Delivery Method

Lecture, practice, interactive activities, presentation

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Attendance 20%, Assignment 10%, Quiz 50%, Role play test 10%, Final interview 10%

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	SNU LEI	Publisher	SNU Press	Textbook	I Love Korean (1) Student's Book	Issued year	2019
(2)	Author	SNU LEI	Publisher	SNU Press	Textbook	I Love Korean (1) Workbook	Issued year	2019
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation & Introduction
Second week	Introductions (1)
Third week	Introductions (2)
Fourth week	Items and Objects (1)
Fifth week	Items and Objects (2)
Sixth week	Food and Ordering (1)
Seventh week	Food and Ordering (2)
Eighth week	Daily Life (1)
Ninth week	Daily Life (2)
Tenth week	Shopping (1)
Eleventh week	Shopping (2)
Twelfth week	Time and Date (1)
Thirteenth week	Time and Date (2)
Fourteenth week	Weather and Life (1)
Fifteenth week	Weather and Life (2)
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH CONVERSATION(1)	Course Number	AIB6093001
Major / School Year	Dept. of English Language & Literature / 1	completion division /Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 알라나 커밍스	Grades/Lecture/Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[15-113:월(7)] [15-403:목(1)]
Office hours			

[1] Outline / Purpose

To learn and practice vocabulary and English grammar in a variety of contexts and situations including conversations, presentations, and group activities.

[2] Course Learning Outcomes

Students should be able to correctly use learned vocabulary and grammar as well as approach English conversations with confidence.

[3] Class Delivery Method

Students will learn through pair work, group work, and lectures presented by the teacher. Detailed syllabus explained on first day of class.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kristen L. Johannsen/ Rebecca Tarver Chase	Publisher	National Geographic	Textbook	World English 2 Third Edition	Issued year	2020
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Syllabus (Complete syllabus given on first day) Class Introduction
Second week	Chapter 1: Food for Life
Third week	Chapter 2: Express Yourself
Fourth week	Chapter 3: Cities
Fifth week	Chapter 5: Challenges
Sixth week	Chapter 6: Transitions
Seventh week	Chapter 7: Things That Matter
Eighth week	Midterm Exam
Ninth week	Chapter 8: Conservation
Tenth week	Chapter 9: Life Now and in the Past
Eleventh week	Chapter 10: Travel
Twelfth week	Chapter 11: Careers
Thirteenth week	Chapter 12: Celebrations
Fourteenth week	Solo Presentations
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH CONVERSATION(1)	Course Number	AIB6093004
Major / School Year	Dept. of English Language & Literature / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 윌리엄 데이비스	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class /	[15-403:수(1),금(1)]
Office hours		lecture room	

[1] Outline / Purpose

The purpose of this class is to improve student's communicative ability and for them to increase their skill in speaking English. Not only will the students be practising to improve their English but they will also be learning how to employ communication strategies to increase their ability to hold conversations in English. Another purpose of this course is to teach the target language of the class to the students, the target language coming from their textbook and being grammar, functional language and vocabulary.

[2] Course Learning Outcomes

By the end of this course students will be able to start and carry on a conversation on any general topic for 5 minutes. They will be able to employ conversation strategies that will enable to extend, change or finish any conversation that they participate in. The students will also be able to use the target language that they have learned in class in conversations and in general writing.

[3] Class Delivery Method

The methodology of teaching in class will follow the Communicative method with the emphasis of input in class placed of the students themselves. Task-based learning and Guided discovery learning will also be used to support the students in their classes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	National Geographic Learning / Cengage Learning	Textbook	World English 2	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introductions
Second week	Unit 2: Express Yourself
Third week	Unit 3: Cities
Fourth week	Unit 4: The Body
Fifth week	Unit 5: Challenges
Sixth week	Unit 7: Things that Matter
Seventh week	Quiz
Eighth week	Midterm Test
Ninth week	Unit 8: Conservation
Tenth week	Unit 9: Life Now and in the Past
Eleventh week	Unit 10: Travel
Twelfth week	Discussion Day
Thirteenth week	Unit 11: Careers
Fourteenth week	Quiz
Fifteenth week	Final Test
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH CONVERSATION(1)	Course Number	AIB6093003
Major / School Year	Dept. of English Language & Literature / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 윌리엄 데이비스	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[15-103:월(7)] [15-116:목(1)]
Office hours			

[1] Outline / Purpose

The purpose of this class is to improve student's communicative ability and for them to increase their skill in speaking English. Not only will the students be practising to improve their English but they will also be learning how to employ communication strategies to increase their ability to hold conversations in English. Another purpose of this course is to teach the target language of the class to the students, the target language coming from their textbook and being grammar, functional language and vocabulary.

[2] Course Learning Outcomes

By the end of this course students will be able to start and carry on a conversation on any general topic for 5 minutes. They will be able to employ conversation strategies that will enable to extend, change or finish any conversation that they participate in. The students will also be able to use the target language that they have learned in class in conversations and in general writing.

[3] Class Delivery Method

The methodology of teaching in class will follow the Communicative method with the emphasis of input in class placed of the students themselves. Task-based learning and Guided discovery learning will also be used to support the students in their classes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
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[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	National Geographic Learning / Cengage Learning	Textbook	World English 2	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introductions
Second week	Unit 2: Express Yourself
Third week	Unit 3: Cities
Fourth week	Unit 4: The Body
Fifth week	Unit 5: Challenges
Sixth week	Unit 7: Things that Matter
Seventh week	Quiz
Eighth week	Midterm Test
Ninth week	Unit 8: Conservation
Tenth week	Unit 9: Life Now and in the Past
Eleventh week	Unit 10: Travel
Twelfth week	Discussion Day
Thirteenth week	Unit 11: Careers
Fourteenth week	Quiz
Fifteenth week	Final Test
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH CONVERSATION(1)	Course Number	AIB6093002
Major / School Year	Dept. of English Language & Literature / 1	completion division /Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 알라나 커밍스	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[15-116:수(1),금(1)]
Office hours			

[1] Outline / Purpose

To learn and practice vocabulary and English grammar in a variety of contexts and situations including conversations, presentations, and group activities.

[2] Course Learning Outcomes

Students should be able to correctly use learned vocabulary and grammar as well as approach English conversations with confidence.

[3] Class Delivery Method

Students will learn through pair work, group work, and lectures presented by the teacher. Detailed syllabus explained on first day of class.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kristen L. Johannsen/ Rebecca Tarver Chase	Publisher	National Geographic	Textbook	World English 2 Third Edition	Issued year	2020
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Syllabus (Complete syllabus given on first day) Class Introduction
Second week	Chapter 1: Food for Life
Third week	Chapter 2: Express Yourself
Fourth week	Chapter 3: Cities
Fifth week	Chapter 5: Challenges
Sixth week	Chapter 6: Transitions
Seventh week	Chapter 7: Things That Matter
Eighth week	Midterm Exam
Ninth week	Chapter 8: Conservation
Tenth week	Chapter 9: Life Now and in the Past
Eleventh week	Chapter 10: Travel
Twelfth week	Chapter 11: Careers
Thirteenth week	Chapter 12: Celebrations
Fourteenth week	Solo Presentations
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Understanding of English Grammar	Course Number	0006969001
Major / School Year	Dept. of English Language & Literature / 1	completion division /Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 김성은	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[15-116:금(6)(7)(8)]
Office hours			

[1] Outline / Purpose

본 수업은 영문법의 기본 원리를 이해하고 실생활에서 활용할 수 있는 문법 지식을 학습하는 것을 목적으로 합니다. 시제, 수동태, 관계사 등 다양한 문법 항목을 체계적으로 다루며, 영어로 효과적으로 표현할 수 있도록 돕는데 목적으로 한다.

[2] Course Learning Outcomes

- 1) 영어 문법의 주요 개념(시제, 수동태, 관계사 등)을 이해하고 활용 능력을 기름.
- 2) 실생활 및 학업 상황에서 문법 지식을 활용한 문장을 작성.
- 3) 학습 내용을 정리하고 타인에게 설명할 수 있는 역량을 개발.

[3] Class Delivery Method

본 수업은 PPT 중심으로 강의와 토론, 및 과제 수행을 중심으로 진행.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	10 %	40 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	50 %	0 %	0 %	0 %	40 %	10 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Raymond Murphy	Publisher	Cambridge	Textbook	Grammar in use intermediate	Issued year	2019
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction Chapter 1. Present and Past
Second week	Chapter 2. Present Perfect and Past
Third week	Chapter 3. Future Chapter 4. Modals
Fourth week	Chapter 5. Passive Chapter 6. Reported speech
Fifth week	Chapter 7. Questions and Auxiliary Verbs 과제(1) 제출일
Sixth week	Chapter 8. -ing and to
Seventh week	Chapter 9. Articles and Nouns Chapter 10. Pronouns and determiners
Eighth week	중간고사
Ninth week	Chapter 11. Relative clauses
Tenth week	Chapter 12. Adjectives and Adverbs
Eleventh week	Chapter 13. Conjunctions and Prepositions 과제(2) 제출일
Twelfth week	Chapter 14. Prepositions
Thirteenth week	Chapter 15. Phrasal Verbs
Fourteenth week	Review 최종과제(3) 제출일
Fifteenth week	기말고사
Sixteenth week	보강주간

[7] Assignments

The first assignment	assignment	Tense별 예문 작성	submission date	2025-04-04 Fri
	purpose	주요 시제를 이해하고, 각 시제의 예문을 직접 작성하며 활용 능력을 키움		
	procedure & notice	-각 시제(현재, 과거, 미래, 진행형 등)를 사용하여 3개씩 예문 작성. -일상생활과 관련된 문맥을 활용하여 작성. -과제 제출 전 문법 오류를 스스로 검토.		
	references	교재 Chapter 1-3		
The second assignment	assignment	Passive Voice 연습	submission date	2025-05-16 Fri
	purpose	능동태와 수동태의 차이를 이해하고, 다양한 문장에서 수동태를 사용할 수 있도록 연습		
	procedure & notice	-교재에서 제공된 능동태 문장을 수동태로 변환한 3개의 예문 작성. -일상 대화 및 학업 관련 문장 작성 연습 포함. -변환된 문장의 주어와 동사가 올바른지 확인.		
	references	교재 Chapter 4		
The third assignment	assignment	나만의 영문법 교재만들기 프로젝트	submission date	2025-06-13 Fri
	purpose	교재 내용을 깊이 학습하였는지 정리		
	procedure & notice	1. 교재에서 다룬 주요 문법 항목(예: 시제, 수동태, 조건문 등)을 포함하여 자신만의 문법 교재를 작성. 2. 각 문법 항목별로 간단한 설명, 예문, 그리고 연습문제를 포함할 것. 3. 만든 교재를 활용해 타인에게 문법을 가르친다는 가정하에, 학습 효과와 개선 방안을 포함한 보고서를 작성. 4. 보고서는 다음 항목을 포함하여 작성: 1) 교재 제작 의도와 목표		

		2) 주요 문법 항목 요약 3) 교수법 및 활용 방안 4) 학습자가 겪을 어려움 및 해결 방안 제안 -문법 교재와 보고서는 제출 전에 반드시 문법과 구성 오류를 검토.
	references	교재 전체 내용 (Chapters 1-15)

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Foundations of English Literature	Course Number	0007859001
Major / School Year	Dept. of English Language & Literature / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 이용화	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[15-403:화(8B-9),수(8B-9)]
Office hours		lecture room	

[1] Outline / Purpose

Course Description and Objectives: This course is designed to help students acquire the tools for understanding, appreciating, and critically analyzing three genres of literature: fiction, poetry, and drama. In this course you will learn some basic concepts about literary technique and innovation.

[2] Course Learning Outcomes

In addition to learning to identify some of the major differences among fiction, poetry, drama, and non-fiction prose, and the qualities intrinsic to each, you will learn to identify significant questions and ideas dealt with by literary authors and describe how literature goes about trying to answer them.

[3] Class Delivery Method

Daily Schedule

The following schedule is subject to change, and I reserve the right to make such changes.

Week 1

Introduction

George Gordon Byron, "She Walks in Beauty"; Edgar Allan Poe, "Annabel Lee"

Week 2

William Blake, "The Little Black Boy" (Summary and Analysis)

Week 3

Thomas Hardy, "A Broken Appointment"; D. H. Lawrence, "Piano"

Week 4

Langston Hughes, "Theme for English B" (What is a paragraph?)

Week 5

Kate Chopin, "The Story of an Hour"

Week 6

D. H. Lawrence, "You Touched Me"

Week 7

Shirley Jackson, "The Lottery"

Week 8

O'Connor, "The Guest of the Nation"

Midterm

Week 9

W. B. Yeats, "The Lake Isle of Innisfree"; "A Drinking Song"

Week 10

Katherine Mansfield, "A Cup of Tea"

Week 11

V.S. Naipaul, "B. Wordsworth"

Week 12

Ralph Waldo Emerson, from "The American Scholar";
Henry David Thoreau, from Walden

Week 13

Eugene O'Neill, Long Day's Journey into Night (movie)

Week 14

Eugene O'Neill, Long Day's Journey into Night (movie)

Week 15

Week 16

Final Exam

참고: 수업시간에 반드시 지켜야 할 사항들

1. 수업 시작 후 혹은 끝나기 전에 강의실 출입을 절대 금함
2. 휴대폰은 반드시 무음 모드로 전환해서 가방에서 꺼내지 않도록 한다.
3. 주변 사람들과 수업 내용과 관계없는 잡담을 금하고 물, 음료수 이외의 음식물 섭취를 금함
4. 이상의 내용을 지키지 않을 경우, 1회 위반 시에는 구두경고와 함께 참가점수 5점 감점 하며, 2회 위반 시에는 수강을 금지시킬 수 있다 (이 경우 자동으로 F학점 부여함).

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	30 %	%	10 %	20 %	10 %	%	%

④ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	%	20 %	%	20 %	%	30 %	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Course Materials: A course packet, available from the university copy shop.

[6] Weekly lesson plans

First week	William Shakespeare, "All the world's a stage"; Charlotte Higgins, "Achilles in the trenches" *Diction, Rhyme, and Speaker)
Second week	Edgar Allan Poe, "The Tell-Tale Heart" (Syntax, Translation, Narration)
Third week	William Blake, "The Little Black Boy" (Summary and Analysis) Percy Bysshe Shelley, "Ode to the West Wind" (stanza 1)
Fourth week	Langston Hughes, "Theme for English B" (What is a paragraph?)
Fifth week	D.H. Lawrence, "Piano" (Response Paper/Plagiarism)
Sixth week	Kate Chopin, "The Story of an Hour"
Seventh week	Shirley Jackson, "The Lottery"
Eighth week	Shirley Jackson, "The Lottery"

	Midterm
Ninth week	William Shakespeare, excerpt from Macbeth and Hamlet
Tenth week	Katherine Mansfield, "A Cup of Tea"
Eleventh week	D.H. Lawrence, "You Touched Me"
Twelfth week	D.H. Lawrence, "You Touched Me"
Thirteenth week	V.S. Naipaul, "B. Wordsworth"
Fourteenth week	Ralph Waldo Emerson, from "The American Scholar"
Fifteenth week	Christopher Nolan, The Prestige (film)
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Foundations of English Literature	Course Number	0007859002
Major / School Year	Dept. of English Language & Literature / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 신나미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[15-403:수(7-8A),금(4-5A)]
Office hours			

[1] Outline / Purpose

This course provides an introduction to the study of narrative. We start with the premise that stories are modes of thought with which writers and readers have engaged with the world for centuries. Works of fiction and non-fiction tell stories that are continuously being reimagined and rewritten. As readers, we are continuously engaged in the project of that rewriting, finding new ways to relate stories to our lives, connect with them, and make them meaningful to ourselves and others. Syllabus is subject to change.

[2] Course Learning Outcomes

Students will come away from this course with a solid understanding of a few key ideas about how narrative works and a vocabulary for describing it. Lectures and discussion will attend not only to close readings of selected works of fiction and non-fiction, but also engage with questions about what literature is and what we do when we read and write about it.

[3] Class Delivery Method

lecture/in-class discussion/small group activities

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
40 %	30 %	0 %	15 %	15 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	60 %	0 %	20 %	0 %	0 %	0 %

[4] Grading Policies

Attendance: 20%
In-class discussion: 10%
Midterm Exam: 25%
Final Exam: 30%
Short Assignments: 10%
Oral Presentation: 5%

① Percentage of grade evaluation

Exam	Attendance	Assignment
55 %	20 %	25 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Most of the readings will be available online (please refer to the course website).

[6] Weekly lesson plans

First week	Introduction
Second week	Why do we tell stories? –Miller, "Narrative"
Third week	Narrative & Voice/Character –Diaz, "Aguantando"
Fourth week	Narrative & Voice/Character –Diaz, "Aguantando"
Fifth week	Narrative & Place –Gilman, "The Yellow Wallpaper"
Sixth week	Narrative & Time –O'Brien, "How to Tell a True War Story"
Seventh week	Midterm Exam
Eighth week	Narrative & Social Context Persepolis
Ninth week	Persepolis
Tenth week	Persepolis
Eleventh week	Narrative & Form –Persepolis (film)
Twelfth week	–King, "I Have a Dream"
Thirteenth week	–Ai Weiwei, "Human Flow"
Fourteenth week	Individual Projects
Fifteenth week	Review/ Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH CONVERSATION(3)	Course Number	AIB6007001
Major / School Year	Dept. of English Language & Literature / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 알라나 커밍스	Grades/Lecture/Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[15-403:월(4),수(4)]
Office hours			

[1] Outline / Purpose

To learn and practice vocabulary and English grammar in a variety of contexts and situations including conversations, presentations, and group activities.

[2] Course Learning Outcomes

Students should be able to correctly use learned vocabulary and grammar as well as approach English conversations with confidence.

[3] Class Delivery Method

Students will learn through pair work, group work, and lectures presented by the teacher. Detailed syllabus explained on first day of class.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Jessica Williams	Publisher	National Geographic Learning	Textbook	21st Century Communication	Issued year	2017
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Syllabus (Complete syllabus given on first day) Class Introduction
Second week	Chapter 1: Secret Wishes
Third week	Chapter 1: Secret Wishes
Fourth week	Chapter 2: Changing Climate, Changing Minds
Fifth week	Chapter 2: Changing Climate, Changing Minds
Sixth week	Discussion Day
Seventh week	Solo Presentations
Eighth week	Midterm Exam
Ninth week	Chapter 3: Unexpected Discoveries
Tenth week	Chapter 3: Unexpected Discoveries
Eleventh week	Discussion Day
Twelfth week	Chapter 4: The Business of Style
Thirteenth week	Chapter 4: The Business of Style
Fourteenth week	Discussion Day
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH CONVERSATION(3)	Course Number	AIB6007002
Major / School Year	Dept. of English Language & Literature / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 윌리엄 데이비스	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class /	[15-116:수(3)(4)]
Office hours		lecture room	

[1] Outline / Purpose

The purpose of this class is to improve students communicative ability and for them to increase their skill in speaking English. Not only will the students be practising to improve their English but they will also be learning how to employ communication strategies to increase their ability to hold conversations in English. Another purpose of this course is to teach the target language of the class to the students, the target language coming from their textbook and being grammar, functional language and vocabulary.

[2] Course Learning Outcomes

By the end of this course students will be able to start and carry on a conversation on any general topic for 5 minutes. They will be able to employ conversation strategies that will enable to extend, change or finish any conversation that they participate in. The students will also be able to use the target language that they have learned in class in conversations and in general writing.

[3] Class Delivery Method

The methodology of teaching in class will follow the Communicative method with the emphasis of input in class placed of the students themselves. Task-based learning and Guided discovery learning will also be used to support the students in their classes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	National Geographic Learning / Cengage Learning	Textbook	21st Century Communication : Listening, Speaking and Critical Thinking 2	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction / Class Orientation
Second week	Unit 1: Secret Wishes
Third week	Unit 1: Secret Wishes
Fourth week	Unit 2: Changing Climate, Changing Minds
Fifth week	Unit 2: Changing Climate, Changing Minds
Sixth week	Discussion Week
Seventh week	Quiz
Eighth week	Midterm Test
Ninth week	Unit 3: Unexpected Discoveries
Tenth week	Unit 3: Unexpected Discoveries
Eleventh week	Unit 4: The Business of Style
Twelfth week	Unit 4: The Business of Style
Thirteenth week	Discussion Week
Fourteenth week	Quiz
Fifteenth week	Final Test
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH COMPOSITION(2)	Course Number	AIB6097001
Major / School Year	Dept. of English Language & Literature / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 알라나 커밍스	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[15-403:월(1),수(6)]
Office hours			

[1] Outline / Purpose

Students will learn how to write more detailed, complex essays, using a wide variety of methods. This class will be easier for students who have completed English Writing 1 or for students who know the basic structure of a English paragraph and essay.

[2] Course Learning Outcomes

By the end of class, students will be familiar with and be able to write a well-organized, longer paper. Students will also review skills in writing organized paragraphs and essays.

[3] Class Delivery Method

Students will work alone and in pairs to complete bookwork, worksheets, and writing assignments along with listening to lectures and presentations on the material given by the teacher. Detailed syllabus explained on first day of class.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Keith S. Folse, April Muchmore-Vokoun, and Elena Vestri Solomon	Publisher	National Geographic Learning and Cengage Learning	Textbook	Great Writing 4 Fifth Edition	Issued year	2022
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Syllabus (Complete syllabus given on first day) Class Introduction
Second week	Chapter 1: Exploring the Essay
Third week	Chapter 1: Exploring the Essay
Fourth week	Chapter 2: Cause–Effect Essays
Fifth week	Chapter 2: Cause–Effect Essays
Sixth week	Chapter 3: Comparison Essays
Seventh week	Chapter 3: Comparison Essays
Eighth week	Midterm Writing Exam
Ninth week	Chapter 4: Argument Essays
Tenth week	Chapter 4: Argument Essays
Eleventh week	Chapter 5: Problem–Solution Essays
Twelfth week	Chapter 5: Problem–Solution Essays
Thirteenth week	Chapter 6: Reaction Essays
Fourteenth week	Chapter 6: Reaction Essays
Fifteenth week	Final Writing Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH COMPOSITION(2)	Course Number	AIB6097002
Major / School Year	Dept. of English Language & Literature / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 윌리엄 데이비스	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[15-403:금(2)(3)]
Office hours			

[1] Outline / Purpose

The purpose of this class is to build upon the 1st years composition class and give students more exposure to different kinds of essays. This class will look at the components of essays and how to successfully write a good essay.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

Write narrative essays
Write comparison essays
Write cause-effect essays
Write argument essays

[3] Class Delivery Method

The method of teaching will be more teacher led than in conversation classes but will still require the students to interact with each other in English. A slightly altered communicative method approach is used by the teacher and will be adapted to suit this writing based class.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Keth S. Folse, April Muchmore-Vokoun, Elena Vestri Solomon	Publisher	National Geographic / Cengage Learning	Textbook	Great Writing 4 (Great Essays)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introductions and Orientation
Second week	Unit 1: Exploring the Essay
Third week	Unit 1: Exploring the Essay
Fourth week	Unit 2: Narrative Essays
Fifth week	Unit 2: Narrative Essays
Sixth week	Unit 3: Comparison Essays
Seventh week	Unit 3: Comparison Essays
Eighth week	Midterm
Ninth week	Unit 4: Cause-effect Essays
Tenth week	Unit 4: Cause-effect Essays
Eleventh week	Unit 5: Argument Essays
Twelfth week	Unit 5: Argument Essays
Thirteenth week	Unit 6: Reaction/response Essays
Fourteenth week	Unit 6: Written Exam and Essay Questions
Fifteenth week	Final Test
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Poetry	Course Number	0010770001
Major / School Year	Dept. of English Language & Literature / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 하인혜	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[15-403:화(2B-3),목(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

A notable tradition in poetry looks outward, training its eye on the natural phenomena of the world around us. Poetry is thus uniquely gifted to examine our intricate human dependency on natural resources. The early twenty-first century, when many vital ecosystems across the globe are nearing critical breakdown, marks an historical crossroads for human civilization, and an urgent opportunity for us to re-evaluate our own cultural resources in meeting the global challenge of sustainability.

In this course, we will read poems drawn from five centuries of English-language verse in the context of current research in the environmental sciences, and discuss poetry's relevance to the larger imperatives of the sustainability movement gathering strength worldwide. In doing so, this course invites students to explore such a variety of poems with a focus on POETIC FORMS, STRUCTURE, and DISTINCT THEMES.

[2] Course Learning Outcomes

Students who do the reading, attend lectures, complete assignments, and participate fully in class discussions should achieve the following:

- As students will read closely a limited set of representative works built on different poetic traditions across different time periods, they are expected to PRACTICE CLOSE READING of texts across a variety of British and American poems.
- As well as developing skills in close reading, students will produce written analysis of texts using a variety of interpretative strategies, and engage with ideas that are important to literary scholars.
- Students are to identify and analyze a reader's emotional engagement with the works assigned in class.
- Students will acquire familiarity with generic terms like 'sonnet,' 'georgic,' 'lyric,' 'epic,' 'mock heroic,' 'satire,' 'pastoral,' 'landscape poetry,' and so on.

[3] Class Delivery Method

Lecture, Discussion, and Presentation

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
40 %	20 %	40 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Course Reader	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to Class Poetic Forms & Periodization
Second week	Intro to SONNETS (PETRARCHAN & SHAKESPEAREAN) – Sir Thomas Wyatt – Earl of Surrey
Third week	Shakespeare's Sonnet Sequence (I)
Fourth week	Shakespeare's Sonnet Sequence (II)
Fifth week	John Donne
Sixth week	Marlowe and Marvell
Seventh week	Robert Herrick
Eighth week	Midterm Exam
Ninth week	Charlotte Smith & Anna Barbauld
Tenth week	Wordsworth & Shelley
Eleventh week	Walt Whitman & Emily Dickinson (I)
Twelfth week	Walt Whitman & Emily Dickinson (II)
Thirteenth week	Animal Poems and the Modern Poetry (I)
Fourteenth week	Animal Poems and the Modern Poetry (II)
Fifteenth week	Elegies & Odes Final Exam Review
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	INTERMEDIATE ENGLISH CONVERSATION(1)	Course Number	AIB6067001
Major / School Year	Dept. of English Language & Literature / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 윌리엄 데이비스	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[15-317:월(4)(5)]
Office hours			

[1] Outline / Purpose

The purpose of this class is to improve students communicative ability and for them to increase their skill in speaking English. This will build on the previous classes studied at INU and will focus on more detailed discussion of the topics rather than focus on grammar (although we will touch on grammar). The focus of the class will again be on the students rather than the teacher and students are expected to actively participate in all classes.

[2] Course Learning Outcomes

By the end of this course, students will be able to discuss in detail common and less common topics that are touched on in class. Students will have improved their fluency after having discussions in classes on various topics with their peers.

[3] Class Delivery Method

The methodology of teaching in class will follow a student-centered communicative method. Activities chosen from the book will be focused on discussion rather than reading, grammar and listening (although they will still be included in the classes). Students should expect to discuss many things in class in every lesson.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Helen Stephenson, Lewis Lansford, Paul Dummett	Publisher	National Geographic Learning / Cengage Learning	Textbook	Keynote 4	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introductions / Orientation
Second week	Unit 1: Embrace Stress (Talking about jobs and stress)
Third week	Unit 1: Embrace Stress (Talking about jobs and stress)
Fourth week	Unit 2: Media Influences (Talking about media and inspirations)
Fifth week	Unit 2: Media Influences (Talking about media and inspirations)
Sixth week	Unit 3: Development (Talking about change)
Seventh week	Unit 3: Development (Talking about change)
Eighth week	Midterm Test
Ninth week	Unit 4: Secrets and Lies (Speculating about the truth)
Tenth week	Unit 4: Secrets and Lies (Speculating about the truth)
Eleventh week	Unit 5: To the edge (Describing Accomplishments)
Twelfth week	Unit 5: To the edge (Describing Accomplishments)
Thirteenth week	Unit 6: Money matters (Using Phrasal Verbs)
Fourteenth week	Unit 6: Money matters (Using Phrasal Verbs)
Fifteenth week	Final Test
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	COMPARATIVE LITERATURE	Course Number	AIB6078001
Major / School Year	Dept. of English Language & Literature / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 이용화	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[15-116:수(7-8A)] [15-403:화(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

*수강 신청 전에 참고할 내용:

2017년도 1학기는 강의는 영어로 토론은 토론자의 선택에 따라 영어 및 한국어로 진행될 예정이며 집중 토론 및 세미나 수업임. 시험 대신 에세이 제출 및 수정 과정을 토론 점수와 함께 평가함. (절대평가 실시)

정원 15명 정도의 소규모 수업 지향함.

영어원전의 경우는 영어교재 사용이 원칙이지만(분량이 길고 어려운 경우 한국어로 미리 읽어보는 것도 장려함)

그 외 외국문학, 철학 작품의 경우 한국어 교재 사용 가능.

Course Description and Objectives:

This course provides a unique introduction to philosophical (existentialist) thinking as they are reflected in the representative works of major writers and thinkers of Western tradition, by applying the methods of philosophical analysis and argumentation to questions and issues confronting all human beings: What is the meaning of a life with the distinctive characteristics of human life? What is the significance of morality in such a life?

What do the need for love, or the susceptibility to shame, anxiety, or boredom, tell us about the human condition? What does it mean to be oneself? The course aims to deepen the students' engagement with these questions, by developing their capacity to analyze critically ordinary beliefs and intuitions about these questions, formulating with clarity and sophistication the problems they pose, and developing well-argued responses to these problems.

[2] Course Learning Outcomes

The course aims to deepen the students' engagement with such questions by developing their capacity to analyze critically their initial views about them, formulating with clarity and sophistication the problems these views might pose, and progressively refining these views so as to resolve these problems. Readings will come from prominent playwrights and novelists including Sophocles, Herman Melville, F. Dostoyevsky, F. Kafka, Eugene O'Neil, and Herman Hesse, as well as from existentialist philosophers and thinkers, such as F. Nietzsche and A. Camus. In the process of examining such existential questions, the students should expect to develop their capacities for analysis, argumentation, and intellectual creativity, as well as their writing and debating skills.

[3] Class Delivery Method

The course aims primarily to develop conceptual literacy about matters of personal existential significance. Conceptual literacy is the capacity to analyze with depth and critical rigor inchoate ordinary beliefs and intuitions about a topic, to formulate with clarity and sophistication the problems they pose, and to develop well-argued responses to these problems.

The course requires no prior philosophical training.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
10 %	50 %	30 %	%	10 %	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	%	%	%	10 %	%	20 %	20 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Existentialist Literature

1. Grand Inquisitor
2. from Myth of Sisyphus, The Pest by A. Camus
3. British?Yeats' Poems
4. American?Eugen O'Neil

Ancient Greek?Oedipus

[6] Weekly lesson plans

First week	Introduction "The Open Boat"
Second week	A. Camus, The Stranger
Third week	A. Camus, The Stranger
Fourth week	A. Camus, The Myth of Sisyphus
Fifth week	F. Dostoyevsky, "The Grand Inquisitor"
Sixth week	H. Hesse, Demian
Seventh week	H. Hesse, Demian
Eighth week	F. Kafka, "Metamorphosis"
Ninth week	F. Kafka, "Metamorphosis"
Tenth week	N. Hawthorne, "Wakefield"
Eleventh week	Herman Melville, "Bartleby, the Scrivener"
Twelfth week	Eugene O'Neill, The Hairy Ape
Thirteenth week	Eugene O'Neill, The Hairy Ape
Fourteenth week	Sophocles, Oedipus
Fifteenth week	Sophocles, Oedipus
Sixteenth week	Final Exam/Essay

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The second assignment	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Research Methods in Linguistics	Course Number	0011630001
Major / School Year	Dept. of English Language & Literature / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 정예지	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[15-116:화(2B-3)] [15-317:목(2B-3)]
Office hours			

[1] Outline / Purpose

This course provides an overview of conducting quantitative research in the field of linguistics. Students will also have an opportunity to systematically analyze and present a variety of linguistic studies, focusing on their research methodologies.

[2] Course Learning Outcomes

To achieve an understanding of processes involved in doing linguistic research and be able to develop a student's own research question along with appropriate methodologies.

[3] Class Delivery Method

This course will include the instructor's lectures on core topics and students' presentations of research papers and their own research proposals. Details will be announced in class after the first week of the semester, depending on the size of class.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction
Second week	Research ethics
Third week	Literature review
Fourth week	Research Design: Qualitative vs. Quantitative
Fifth week	Research Design: Longitudinal vs. Cross-sectional
Sixth week	Conduct an experiment (1)
Seventh week	Conduct an experiment (2)
Eighth week	Midterm
Ninth week	Individual meeting
Tenth week	Data collection
Eleventh week	Data processing
Twelfth week	Paper presentation (1)
Thirteenth week	Paper presentation (2)
Fourteenth week	Review
Fifteenth week	Final presentation
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH PHONOLOGY	Course Number	AIB6018001
Major / School Year	Dept. of English Language & Literature / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 정예지	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[15-403:월(7-8A),목(7-8A)]
Office hours			

[1] Outline / Purpose

This course is about how linguists analyze sounds in the world's languages. We'll look at the rules that determine how sounds look in human languages, processes that can alter sounds, the interaction between sounds and words, and some of the assumptions underlying current theories.

[2] Course Learning Outcomes

To achieve an understanding of the basic concepts of phonological theory and the ability to use basic tools of phonological analysis.

[3] Class Delivery Method

This course will be mainly composed of the instructor's computer-based lectures and in-class problem-solving assignments. Any further details will be determined based on the number of students who enroll this class.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Review of phonetics
Third week	Review of phonetics
Fourth week	Phonemes and allophones
Fifth week	Distribution of sounds (1)
Sixth week	Distribution of sounds (2)
Seventh week	Notation and writing a phonological rule (1)
Eighth week	Review + Midterm
Ninth week	Notation and writing a phonological rule (2)
Tenth week	Distinctive features (1)
Eleventh week	Distinctive features (2)
Twelfth week	Distinctive features (3)
Thirteenth week	Morphology–Phonology interaction (1)
Fourteenth week	Morphology–Phonology interaction (2)
Fifteenth week	Review + Final
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	American Novel	Course Number	0007982001
Major / School Year	Dept. of English Language & Literature / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 신나미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[15-317:금(7-8A)] [15-323:화(4-5A)]
Office hours			

[1] Outline / Purpose

In this seminar, we examine how stories of immigration have informed US literature. We will trace a wide range of texts that offer insights into experiences of im/migration. This seminar will mainly focus on stories about the experience of immigrants arriving in the US in the late twentieth and twenty-first centuries. What are the key themes explored by authors interested in the immigrant experience? Are there historical events that have shaped the immigrant's experience? Have stories of immigration changed during the last two decades? Although we will mainly focus on the novel as a key genre, the seminar's discussion will also take into consideration short stories and films.

[2] Course Learning Outcomes

Students will develop an understanding of the immigrant novel as a genre informing US literature.
Students will learn about the history of immigration in the US through close engagement with literary texts.
Students will gain deep knowledge of the novel as a literary genre.

[3] Class Delivery Method

in-class discussion/lecture/group activities

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm and Final Exam, short assignments, and one oral presentation.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction/ Junot Diaz, selected stories from Drown
Second week	Junot Diaz, selected stories from Drown (continued)
Third week	Mohsin Hamid, The Reluctant Fundamentalist
Fourth week	The Reluctant Fundamentalist
Fifth week	The Reluctant Fundamentalist
Sixth week	The Reluctant Fundamentalist
Seventh week	Review/ Midterm Exam
Eighth week	Viet Thanh Nguyen, selected stories from The Refugees
Ninth week	Viet Thanh Nguyen, selected stories from The Refugees (continued)
Tenth week	Dinaw Mengestu, All Our Names
Eleventh week	All Our Names
Twelfth week	All Our Names
Thirteenth week	All Our Names
Fourteenth week	All Our Names
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRACTICAL ENGLISH COMPOSITION	Course Number	AIB6073001
Major / School Year	Dept. of English Language & Literature / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 알라나 커밍스	Grades/Lecture/Practice	2 / 2 / 0
Phone Number		A weekday / class / lecture room	[15-116:금(4)(5)]
Office hours			

[1] Outline / Purpose

To learn and practice writing business emails, resumes, and cover letters as well as other forms of business writing in English.

[2] Course Learning Outcomes

Students will be able to write coherent, polite, informative business emails, resumes and cover letters, all in English.

[3] Class Delivery Method

Students will work alone or in pairs to complete assignments. Teacher will use book, PPT, lectures, and worksheets to deliver content. Detailed syllabus explained on first day of class.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Syllabus (Complete syllabus given on first day) Class Introduction
Second week	Emails 1
Third week	Emails 2
Fourth week	Emails 3
Fifth week	Emails 4
Sixth week	Resumes 1
Seventh week	Resumes 2
Eighth week	Midterm Exam
Ninth week	Resume 3
Tenth week	Resume 4
Eleventh week	Cover Letters 1
Twelfth week	Cover Letters 2
Thirteenth week	Cover Letters 3
Fourteenth week	Cover Letters 4
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH SPEECH & DEBATE	Course Number	AIB6074001
Major / School Year	Dept. of English Language & Literature / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language & Literature / 윌리엄 데이비스	Grades/Lecture/Practice	2 / 2 / 0
Phone Number		A weekday / class /	[15-116:목(4)(5)]
Office hours		lecture room	

[1] Outline / Purpose

The purpose of this class is to teach students how to effectively debate with each other. This includes both being taught the different aspect of how to debate and practicing debating themselves. Students will sharpen their skills for critical thinking and will be able to discuss debate topics that they would choose in class.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

Deliver an argument persuasively

Effectively refute arguments

Effectively prepare, deliver, and respond to a cross-examination

[3] Class Delivery Method

The methodology of teaching in class will roughly follow a communicative method, with lots of emphasis on student participation and talking. However some teacher led classes will be given when giving instruction on debate structure, rules, how to research, how to write a rebuttal, etc.

This class is a student-centred class. You will be discussing the content a lot. It will not be a lecture style where the teacher talks and the students listen. The students will actively participate in learning.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	As of now there is no course book but this might possibly change	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introductions and Orientation
Second week	Debate Structure, rules, etiquette. SPAR format of debate Informal Debate Activity
Third week	Debate Format – Introducing your arguments clearly. Explanation of Rebuttals / Cross Examinations
Fourth week	Debate Tip. Creating an opening argument – Argument, reasoning, evidence. (Argument structure) Debate Topic: Afterschool Academies
Fifth week	Debate Practice, Note taking during opponents speech, Rebuttals
Sixth week	Refutations
Seventh week	Midterm Test explanation / practice
Eighth week	Midterm Test
Ninth week	Giving Speeches 1
Tenth week	Giving Speeches 2
Eleventh week	Giving Speeches Functional Language
Twelfth week	Giving a Speech Assessment
Thirteenth week	Discussion / Debate Topic (The topic will be selected by the teacher on a current event or an established debate topic)
Fourteenth week	Student led Debates (The topics will be selected by the students on a current event or an established debate topic)
Fifteenth week	Final Test
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Computational Physics	Course Number	0010802001
Major / School Year	Dept. of Physics / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Physics / 언후 도르츠	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[05-117:화(1-2A)] [05-325:목(1-2A)]
Office hours			

[1] Outline / Purpose

Today the computer based simulation is one of the most important subject in material science, physics, and chemistry. The content in this course is twofold. First half semester covers the essentials of computational science and explains how computational tools and techniques work to solve the material science problems. And, for the second half, we will study some basic programming tools, such as MATLAB and MATHEMATICA, as well as practical simulation using VASP method with various of examples in very beginning level.

[2] Course Learning Outcomes

You will obtain a basic knowledge on computational science and programming tools.

[3] Class Delivery Method

Lectures with ppt slides and computer simulation.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
40 %	20 %	10 %	20 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	20 %	0 %	0 %	0 %	60 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	Taylor&Francis	Textbook	June Gunn Lee, Computational Materials Science: An Introduction	Issued year	2012
(2)	Author		Publisher	World Scientific Publishing Company	Textbook	Van Wyk Steve, Computer Solutions In Physics: with Applications in Astrophysics, Biophysics, Differential Equations, and Engineering	Issued year	2013
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Computational material science, methods in computational physics
Third week	Computational material science, methods in computational physics
Fourth week	Molecular dynamics
Fifth week	First principles methods
Sixth week	Density functional theory
Seventh week	Density functional theory calculations with VASP
Eighth week	Midterm
Ninth week	Equations of motions in Mathematica and Matlab programs
Tenth week	Equations of motions in Mathematica and Matlab programs
Eleventh week	Differential equations in Mathematica and Matlab programs
Twelfth week	Partial differential equations in Mathematica and Matlab programs
Thirteenth week	DFT calculations on structural properties: graphene and bcc Fe as an example
Fourteenth week	DFT calculations on electronic structure: graphene and bcc Fe as an example
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MATHEMATICAL PHYSICS(1)	Course Number	BKB6006001
Major / School Year	Dept. of Physics / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Physics / 엠후 도르츠	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[05-325:목(5B-6),금(1-2A)]
Office hours			

[1] Outline / Purpose

Mathematical physics refers to development of mathematical methods for application to problems in physics. This course provides the details of mathematical apparatus, and some derivations and proofs for the mathematical formulations of physical theories.

[2] Course Learning Outcomes

To acquire a comprehensive knowledge on mathematical concepts which will be used as a tool for the subsequent physics courses.

[3] Class Delivery Method

Offline lectures mostly on board notes and ppt slides

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	20 %	20 %	0 %	0 %	10 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
80 %	0 %	20 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	Elsevier LLC	Textbook	G. B. Arfken, H.J. Weber, and F. E. Harris	Issued year	2012
(2)	Author		Publisher		Textbook	Mathematical Methods for Physicists: A comprehensive guide	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Mathematical Preliminaries
Third week	Mathematical Preliminaries
Fourth week	Determinants and Matrices
Fifth week	Vector analysis
Sixth week	Tensors and Differential Forms
Seventh week	Vector Spaces
Eighth week	Midterm
Ninth week	Eigenvalue Problems
Tenth week	Eigenvalue Problems
Eleventh week	Ordinary Differential Equations
Twelfth week	Ordinary Differential Equations
Thirteenth week	Partial Differential Equations
Fourteenth week	Partial Differential Equations
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Clothing care and environment	Course Number	0011425001
Major / School Year	Dept. of Fashion Industry / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Fashion Industry / 조윤경	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[05-406:화(5B-6),목(2B-3)]
Office hours			

[1] Outline / Purpose

Understanding the scientific principles of clothes laundry, drying, caring, and detergent.

Sharing interesting ideas related to meeting the needs of a convenient lifestyle and environmental regulations with classmates.

[2] Course Learning Outcomes

의류의 사용과 관리 및 폐기과정에 필요한 지식을 학습한다. 세탁과 건조 원리 및 소재별 적합한 의류 관리법을 이해하고, 의류 컨디션의 유지와 수명 연장을 위한 방안을 논의한다. 또한 의복의 관리와 폐기 과정에서 발생하는 환경문제에 대해 인지하고 섬유패션 산업의 지속가능성을 위한 노력과 방안을 탐구한다.

In this class, students will acquire the knowledge essential for clothing care and disposal. They will develop an understanding of laundering and drying principles, along with appropriate clothing care methods based on textile components. Additionally, students will gain awareness of environmental issues related to clothing care and disposal, and explore initiatives and solutions for promoting sustainable clothing lifecycles.

[3] Class Delivery Method

This class is made up of lecture and student presentation. Lecture will cover the basic theories related to scientific principles of clothes laundry, drying, caring, and detergent.

Students will be presenting on a variety of topics on clothing care and environment. Peer evaluation will be conducted.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook	Lecture note (Students must download and print it from the e-learning)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	(3/4, Tue) [Online–Zoom] Class orientation (3/6,, Thu) [Online–Video] Introduction to clothing care and environment
Second week	(3/11, Tue) Detergent (1) (3/13,, Thu) Detergent (2)
Third week	(3/18, Tue) Detergent (3) (3/20,, Thu) Detergent (4)
Fourth week	(3/25, Tue) Detergent (5) (3/27, Thu) Presentation, Peer evaluation (1)
Fifth week	(4/1, Tue) Laundry (1) (4/3, Thu) Laundry (2)
Sixth week	(4/8, Tue) Laundry (3) (4/10, Thu) Laundry (4)
Seventh week	(4/15, Tue) Laundry (5) (4/17, Thu) Presentation, Peer evaluation (2)
Eighth week	(4/22, Tue) Self–directed study for midterm exam preparation (4/24, Thu) Midterm examination
Ninth week	(4/29, Tue) Drying (1) (5/1, Thu) Drying (2)
Tenth week	(5/6, Tue) [Online–Video] Drying (3) (5/8, Thu) [Online–Video] Clothing care machine (1)
Eleventh week	(5/13, Tue) Clothing care machine (2) (5/15, Thu) Clothing care machine (3)
Twelfth week	(5/20, Tue) Presentation, Peer evaluation (3) (5/22, Thu) Presentation, Peer evaluation (4)
Thirteenth week	(5/27, Tue) Sustainability (1) (5/29, Thu) Sustainability (2)
Fourteenth week	(6/3, Tue) Sustainability (3) (6/5, Thu) Sustainability (4)
Fifteenth week	(6/10, Tue) Final examination
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Aquaculture and the Environment (with lab)	Course Number	0006867001
Major / School Year	Dept. of Marine Science / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Marine Science / 김장균	Grades/Lecture/ Practice	3 / 2 / 2
Phone Number		A weekday / class / lecture room	[05-336:화(1)(2)] [05-432:수(7)(8)]
Office hours			

[1] Outline / Purpose

The course will include the fundamentals of fish, shellfish, seaweed culture, including discussions of the various types of culture systems used (tanks, ponds, raceways, recirculating systems, open water, etc.), water quality management, nutrition and feeds, diseases, genetics and breeding, harvesting and transport, economics and business, sustainability, and regulatory issues. Culture techniques for species of commercial importance are incorporated into the course

[2] Course Learning Outcomes

Introduce principles of aquaculture;

Examine major aquaculture species and culture practice worldwide as well as in Korea;

Learn basic aquaculture practices and related techniques through field/laboratory exercises;

Understand environmental impacts of aquaculture; and

Introduce environmentally friendly aquaculture practices

[3] Class Delivery Method

The course will consist of lectures and field/laboratory activities. This course will utilize textbooks, research papers, and diverse web resources to deliver content. Student participation will be assessed by pop-up quizzes and thoughtful contributions to discussion. Reaction papers for field activities will be assigned, where students will be introduced to advanced technologies developed in aquaculture. Each student is also required to make a presentation at the Student Conference.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	10 %	5 %	20 %	%	%	15 %	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	90 %	10 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Handout	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Lucas and Southgate	Publisher	Wiley-Blackwell	Textbook	Aquaculture, Farming aquatic animals and plants 2nd ed	Issued year	2012
(2)	Author	Shumway (ed)	Publisher	Wiley-Blackwell	Textbook	Shellfish Aquaculture and the Environment	Issued year	2011
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Water Quality
Third week	Nutrition
Fourth week	Foods and Feeding
Fifth week	Diseases
Sixth week	Fish Aquaculture
Seventh week	Shellfish Aquaculture
Eighth week	Mid-term exam
Ninth week	Seaweed Aquaculture
Tenth week	Desert Aquaculture
Eleventh week	Integrated Multi-trophic Aquaculture (IMTA) I
Twelfth week	Integrated Multi-trophic Aquaculture (IMTA) II
Thirteenth week	Nutrient Bioextraction
Fourteenth week	Off-Shore Aquaculture
Fifteenth week	Student Conference
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment	Presentation	submission date	
	purpose	1) to provoke deep understanding of the given topic; 2) to improve presentation skills		
	procedure & notice	Each student is required to select min 3 papers on a topic in Aquaculture and make a presentation about the selected topic at the Student Conference.		
	references			
The second assignment	assignment	Reaction papers	submission date	
	purpose	1) to develop the ability to express oneself in an academic and professional manner; 2) to develop the ability to research, understand, and then communicate information; 3) to improve writing skills and to and to provide the student the chance to have personal input		
	procedure & notice	Each student will be assigned to write a reaction paper per a field trip (activity). Details about the reaction paper will be provided by the instructor.		
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Case Studies in Public Relations	Course Number	0008709001
Major / School Year	Dept. of Media and Communication / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Media and Communication / 김지선	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[13-305:월(5B-6),목(7-8A)]
Office hours			

[1] Outline / Purpose

This course has students apply what they have learned in previous public relations courses to look at public relations from a management or consultant perspective. The case study approach is used to present a range of different types of public relations issues for discussion and analysis.

[2] Course Learning Outcomes

- Understand the strategic role of PR within organizations to identify, prevent, and solve problems or seize opportunities.
- Understand and be able to demonstrate the value of PR from a management perspective.
- Obtain experience in the counseling function of public relations.
- Gain experience working collaboratively in a group to address a PR problem/opportunity.

[3] Class Delivery Method

Various methods will be employed in this course: lecture, discussion, and presentation. Interactive classroom discussions will enhance learning, but are dependent on student participation.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	40 %	0 %	0 %	20 %	10 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	40 %	0 %	0 %	0 %

[4] Grading Policies

Grades are earned not given. You are responsible for your own success in the course.

Final course grade will be based on these percentages:

Attendance (20%)

Participation (10%)

Discussion Questions and Discussion Leader (10%)

Midterm Exam (20%)

Final Exam (20%)

Final Project (20%)

① Percentage of grade evaluation

Exam	Attendance	Assignment
40 %	20 %	40 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

There is no required textbook in this course. Instead all required readings will be posted on the course website.

[6] Weekly lesson plans

First week	Intro to Course *The instructor reserves the right to change the topics, assignments, grading system, and schedule if necessary. All changes will be announced in class.
Second week	PR Process I
Third week	PR Process II
Fourth week	How to evaluate PR cases
Fifth week	Case Example
Sixth week	Case Example
Seventh week	Case Example
Eighth week	Midterm Exam
Ninth week	Case Example
Tenth week	Case Example
Eleventh week	Final Project Preparation
Twelfth week	Final Project Preparation
Thirteenth week	Final Project Presentations
Fourteenth week	Final Project Presentations
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Consumer Psychology and Persuasion	Course Number	0008687001
Major / School Year	Dept. of Media and Communication / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Media and Communication / 김태민	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-104:월(1-2A),수(1-2A)]
Office hours	Mon/Wed 1500-1700 / by appointment	lecture room	

[1] Outline / Purpose

This is an introductory course about the psychological theories and consumer behavior that can explain how advertising affects consumers. The focus of this course is on psychological theories and concepts such as attitudes, memory, motivation, involvement, values, decision making, etc. More socially oriented approaches will be also discussed such as social judgement, stereotypes and lifestyle. The goal is to provide students with a sound understanding of how advertising works and how consumers react to advertising on a psychological level. In doing so, students will enhance critical and analytical thinking skills that help to identify consumer insights and develop an effective advertising strategy.

[2] Course Learning Outcomes

Upon completion of this course, students should be able to:

- Identify the use of psychological theories and concepts in advertisements
- Describe these theories that can be used in explaining the possible effects of advertising on consumers' perception and behavior
- Explain how advertising campaigns may impact consumers' perception and behavior by using these theories
- Apply these theories in developing an advertising strategy

[3] Class Delivery Method

Lecture, discussion

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	30 %	0 %	20 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	60 %	0 %	20 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Bob Fennis, Wolfgang Stroebe	Publisher	Taylor & Francis	Textbook	The Psychology of Advertising (2nd edition)	Issued year	2016
(2)	Author	Michael R. Solomon	Publisher	Pearson	Textbook	Consumer Behavior: Buying, Having, and Being	Issued year	2016
(3)	Author	Michael I. Norton	Publisher	Cambridge University Press	Textbook	The Cambridge Handbook of Consumer Psychology	Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Introduction The functions and effects of advertising
Second week	Attention to and information processing from advertising
Third week	Attention to and information processing from advertising (continued)
Fourth week	Advertising effects on memory
Fifth week	Advertising effects on memory (continued)
Sixth week	Attitude formation toward advertising and brand
Seventh week	Attitude formation toward advertising and brand (continued)
Eighth week	Mid-term exam
Ninth week	Persuasion and attitude change
Tenth week	Persuasion and attitude change (continued)
Eleventh week	Advertising and consumer behavior
Twelfth week	Advertising and consumer behavior (continued)
Thirteenth week	Beyond persuasion
Fourteenth week	Online advertising and persuasion via online communication
Fifteenth week	Final exam
Sixteenth week	Make-up class

[7] Assignments

The first assignment	assignment	Advertising analysis	submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment	English presentation	submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Crisis Communication	Course Number	0008705001
Major / School Year	Dept. of Media and Communication / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Media and Communication / 김지선	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[13-305:월(7-8A),목(5B-6)]
Office hours			

[1] Outline / Purpose

This course will examine current approaches to defining crises, issues management, and crisis management through a mix of discussion, lecture, and presentation. Moreover, the students in this course will explore cutting edge approaches to the study of issues and crisis management by applying research, theory, and case examples to these situations with a goal of developing better issue identification and strategic response sets to crisis situations.

[2] Course Learning Outcomes

- Define key terms relating to crisis communication in public relations
- Locate, interpret, and analyze case studies to identify best and worst practices
- Apply research and crisis management strategies to relevant situations
- Demonstrate ability to develop a crisis communication case studies

[3] Class Delivery Method

Various methods will be employed in this course: lecture, discussion, and presentation. Interactive classroom discussions will enhance learning, but are dependent on student participation.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	40 %	0 %	0 %	20 %	10 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	40 %	0 %	0 %	0 %

[4] Grading Policies

Grades are earned not given. You are responsible for your own success in the course.

Final course grade will be based on these percentages:

Attendance (20%)

Participation (10%)

Discussion Questions and Discussion Leader (10%)

Midterm Exam (20%)

Final Exam (20%)

Final Project (20%)

① Percentage of grade evaluation

Exam	Attendance	Assignment
40 %	20 %	40 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

There is no required textbook in this course. Instead all required readings will be posted on the course website.

[6] Weekly lesson plans

First week	Intro to Course *The instructor reserves the right to change the topics, assignments, grading system, and schedule if necessary. All changes will be announced in class.
Second week	Understanding Crises and Defining Crisis Communication
Third week	Understanding Crisis Communication Theory and Practice I
Fourth week	Understanding Crisis Communication Theory and Practice II
Fifth week	Crisis Management Life Cycle I – Proactive Phase
Sixth week	Crisis Management Life Cycle II – Strategic Phase
Seventh week	Crisis Management Life Cycle III – Reactive Phase Crisis Communication Strategies
Eighth week	Midterm Exam
Ninth week	Crisis Management Life Cycle IV – Recovery Phase Reputation Management
Tenth week	Introduction to Final Project
Eleventh week	Final Project Preparation
Twelfth week	Final Project Preparation
Thirteenth week	Final Presentations
Fourteenth week	Final Presentations
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Data analysis and visualization	Course Number	0010843001
Major / School Year	Dept. of Library and Information Science / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Library and Information Science / 왕린	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[13-106:월(5B-6)] [29-209:목(2B-3)]
Office hours			

[1] Outline / Purpose

This course introduces students to the fundamentals of data analysis and effective visual storytelling and communication methods.

[2] Course Learning Outcomes

The students will learn how to communicate data findings in visual and written contexts.

[3] Class Delivery Method

Offline

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	10 %	0 %	40 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Cole Nussbaumer Knaflic	Publisher	Wiley	Textbook	Storytelling with Data: A Data Visualization Guide for Business Professionals	Issued year	2015
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Define the questions.
Third week	Get the data.
Fourth week	Explore the data I
Fifth week	Explore the data II
Sixth week	Project I
Seventh week	Extend the data.
Eighth week	Midterm Exam
Ninth week	Visualization tools I
Tenth week	Visualization tools II
Eleventh week	Design
Twelfth week	Design
Thirteenth week	Project II
Fourteenth week	Final thoughts
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PUBLIC ORGANIZATIONS	Course Number	CFB6001001
Major / School Year	Dept. of Public Administration / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration / 제시 캠벨	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-107:월(2B-3),화(5B-6)]
Office hours	TBA (and by appointment)	lecture room	

[1] Outline / Purpose

There are few things more ubiquitous than organizations. Consequently, organization theory, or the body of thought and writing that focuses on why and how organizations exist, is a broad and rich field. At the same time, the formal study of organizations is a relatively new phenomenon that has evolved quickly over the past century, and the study of organizations is rooted in different disciplines including sociology, management, economics, and, of course, public administration. It is, therefore, an eclectic body of work. This course aims to familiarize students with key organizational perspectives as well as highlight their relevance to public administration and management.

[2] Course Learning Outcomes

After taking this course, students should be able to:

- Understand key ideas in organization theory
- Understand the overall development of the field of organization theory
- Apply various theories to existing organizations
- Discuss the ways in which public organizations may be unique, as well as the consequences of this uniqueness for theory and practice

[3] Class Delivery Method

Detailed instructions for each of the assignments below will be provided in class.

Attendance (20%): Students are expected to attend all classes. Absences should be explained with a note from the relevant source.

Midterm and final interviews (20% each): In small groups, students will have face to face interviews with the professor where they will be asked to demonstrate their understanding of key readings from the lectures. Reviews will be provided.

Theory presentation (20%): In small groups, students will present, in the form of a debate, material from the class.

Primary source paper (20%): Each student will write a short essay on a primary text.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

Detailed instructions for each of the assignments below will be provided in class.

Attendance (20%): Students are expected to attend all classes. Absences should be explained with a note from the relevant source.

Midterm and final interviews (20% each): In small groups, students will have face to face interviews with the professor where they will be asked to demonstrate their understanding of key readings from the lectures. Reviews will be provided.

In depth country analysis (20%): In small groups, students will make a presentation to the class about a particular administrative system. Relevant readings will be provided by the professor.

Comparative essay (20%): Students will write an essay comparing 2 administrative systems of their choice. Theory from the class should be intergraded into the essay. However, students will also have a mandatory one-on-one meeting with me sometime before the essay is due to discuss their progress.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	All readings for the course will be provided by the professor in the form of a downloadable	Issued year	
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to the course: Organizations and organization theory The classical approach to organizations
Second week	Introduction: Max Weber and bureaucracy
Third week	Scientific management: Taylorism
Fourth week	Administrative management: Fayol and Gulick
Fifth week	Class presentations Human relations, informality, and motivation
Sixth week	The discovery of humans at work: The Hawthorne experiments
Seventh week	Motivating employees: The principal-agent dilemma
Eighth week	Midterm examinations
Ninth week	Higher order needs: Maslow and McGregor
Tenth week	Management vs leadership
Eleventh week	Markets, bureaucracies, and clans: Ouchi
Twelfth week	Class presentations Organizations and their environments
Thirteenth week	Contingency theory
Fourteenth week	Resource dependence theory
Fifteenth week	Institutional theory
Sixteenth week	Final examination

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	HUMAN RELATIONS IN GOVERNMENT	Course Number	CFB6030001
Major / School Year	Dept. of Public Administration / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-205:목(4-5A),금(4-5A)]
Office hours	T, W, Th, F 10:30-12:00	lecture room	

[1] Outline / Purpose

To teach students about the reality of work and the human factor at work as well as about human relations more generally. The student who completes the course should feel more prepared to enter the world of work.

[2] Course Learning Outcomes

Each student should be prepared to understand the work norms of their likely field of employment and how to deal with other people in an institutional setting.

[3] Class Delivery Method

The course proceeds with lectures and material about HR and HR functions presented through the book, audio lectures, and in-class addressing of student concerns regarding the material with class reserved for questions and practical exercises. Students are expected to participate in the online discussion forum.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
25 %	30 %	15 %	15 %	0 %	0 %	0 %	15 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
40 %	0 %	0 %	0 %	30 %	10 %	0 %	20 %

[4] Grading Policies

Grading: 20% Homework/Discussion 30% Midterm Written/Interview
20% Attendance 30% Final Written/Oral

Homework/Discussion will be evaluated through the workbook, in-class discussion, and participation in online forum questions and discussion activity. There will be a written and interview Midterm and a written and interview Final exam. Attendance is an important part of the course.

The reading should be done prior to class so that class time may focus on questions, review and practical exercises. Attendance is an important part of the course. If you are unable to attend the class, you should contact the professor as far in advance as possible. A good-faith effort should be made to participate in class. Student questions are encouraged, especially on work and general English topics.

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Chad Anderson	Publisher	Electronic Text	Textbook	HR for Public Administration	Issued year	
(2)	Author	Chad Anderson	Publisher	Electronic Text	Textbook	HR for Public Administration Workbook	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Performance Perspective What is our position related to work and the economy?
Second week	Motivation How are people motivated?
Third week	Personality What are the basic differences between people?
Fourth week	Staffing How do organizations recruit employees?
Fifth week	Attitudes What are the different attitudes that guide people's behavior?
Sixth week	Interviewing
Seventh week	Training How are people prepared for work?
Eighth week	Midterm Review Written Midterm
Ninth week	Evaluation How is performance measured and work evaluated?
Tenth week	Leadership What is Leadership?
Eleventh week	Compensation What is the basis for paying people for work?
Twelfth week	Employee Relations How do organizations and employees promote justice?
Thirteenth week	Conflict What causes conflict?
Fourteenth week	Oral Exams
Fifteenth week	Final Review Written Final
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	
	purpose			

The second assignment				
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	HISTORY OF PUBLIC ADMINISTRATION	Course Number	CFB6022001
Major / School Year	Dept. of Public Administration / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-205:화(4-5A),수(4-5A)]
Office hours	T, W, Th, F 10:30-12:00	lecture room	

[1] Outline / Purpose

The class is designed to help students place government issues in a historical context. This is done by comparing historical and current standards of good government, primarily in the South Korean and US context, with a focus placed on the role of civil servants and citizens in the process, with the understanding that students are and/or will be playing these roles in the future.

[2] Course Learning Outcomes

Students successfully completing this class will have improved ability to apply administrative concepts to the objective evaluation of and participation in actual civic affairs. Students should also have increased confidence in their major as it relates to society in addition to enhanced English and Korean communication skills.

[3] Class Delivery Method

The course will proceed by discussion of questions raised in the readings, sharing of the results, student questions, followed by eventual practical activities to illustrate course principles.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
35 %	35 %	0 %	15 %	0 %	0 %	0 %	15 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
40 %	0 %	20 %	0 %	0 %	0 %	0 %	40 %

[4] Grading Policies

Grading: 20% Attendance 60% Exams: 20% Midterm 20% Oral
10% Homework 10% Discussion 20% Final

Participation will be evaluated through in-class discussion and participation in online forum questions and discussion activity. There will be a final Oral exam about a topic of the student's choice applying course concepts. There will be a Midterm and a Final exam.

Attendance is an important part of the course. If you are unable to attend the class, you should contact the professor as far in advance as possible, preferably by email or on the E-Learning message system. There will be some Homework, specifically preparing for and evaluating the class activities. Student questions are encouraged, especially on work and general English topics.

The reading should be done prior to class so that class time may focus on questions, review and practical exercises.

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction What is good government?
Second week	Good Government How should government respond to climate change?
Third week	Paradigms of Public Administration How does society change?
Fourth week	US and Korean Government Ethics What ethics should Korea follow?
Fifth week	Korean Administration History What can be learned from history?
Sixth week	US Administration History What can be learned from the US?
Seventh week	Democracy and Bureaucracy How can democracy and bureaucracy be reconciled?
Eighth week	Midterm
Ninth week	The Public Administration Century What do you need to know to play your role in society?
Tenth week	60 Years of PA in Korea What is corruption?
Eleventh week	Corruption How can you fight corruption?
Twelfth week	Activity–election Election Campaign/Governing Plans
Thirteenth week	Activity–governance Governance
Fourteenth week	Oral Exams What is the responsibility of the citizen in a democracy?
Fifteenth week	Final Review Final
Sixteenth week	

[7] Assignments

	assignment		submission date	

The first assignment	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Administration and Politics	Course Number	0004828001
Major / School Year	Dept. of Public Administration / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration / 타오	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-205:화(7-8A),목(2B-3)]
Office hours	Wednesdays 9:30~13:00	lecture room	

[1] Outline / Purpose

This course is designed to introduce students to the connections between politics and administration in government institutions. These are important connections to understand if one wishes to work in government. The differences between the two areas are often difficult to see without training, and yet being unaware of these differences can make your job as a public official very burdensome.

[2] Course Learning Outcomes

This course has three main objectives:

- 1) Have students understand important differences between politics and administration;
- 2) Highlight the connections between the two: how politics influences administration; and how administration influences politics;
- 3) Demonstrate how this works in multiple contexts under the label of "governance": different levels of government (national vs. local); different national governments; and different international organizations (UN, UNESCO, International Court of Justice).

[3] Class Delivery Method

Students will demonstrate their mastery of these areas in the following ways:

- Attendance: 20% (includes demonstrating understanding of the readings);
- Tests: 60% (30% midterm exam; 30% final exam);
- Presentation: 20% (Group presentation on the power of politics or the power of administration).

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	70 %	0 %	10 %	0 %	0 %	0 %

[4] Grading Policies

Students will be given readings to complete each week. The readings will help students understand the lectures, so it is important that students complete the readings BEFORE the lectures. To help you with this, the readings are posted on the eLearning site and will be available throughout the semester. We will focus on building vocabulary, connecting concepts, and bringing the two different perspectives on politics and administration together.

Tests: There will also be a midterm examination during the 7th week of the semester Thursday, April 17th) and a comprehensive final exam (Thursday, June 12th).

Persuasive Presentation: Depending on class size, students will be placed in groups to make a presentation that is attempting to persuade your audience that one (and only one!) of the following positions is correct: 1) politics is more important to governance in a democratic society than administration; OR 2) administration is more important to governance in a democratic society than politics. Each group will present their case to the class, and each group will be rated according to how well they present their argument.

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Charles Lindblom, Edward Woodhouse	Publisher	Prentice-Hall	Textbook	The Policy-making Process	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

There may be occasional chapters distributed through the eLearning site.

[6] Weekly lesson plans

First week	Introduction to the course: What is politics? What is administration? What connects the two and why should we care? Quick quiz.
Second week	Modern Politics and Policy-Making: The Importance of Good Administration Readings: "The Challenges Facing Policy-Making", Chapter 1.
Third week	Limits to Administration: What Weaknesses do Administrators Have? Readings: "The Limits of Analysis". Chapter 2.
Fourth week	Democratic Goals: How to Make Democracy Wise? Readings: "The Potential Intelligence of Democracy". Chapter 3.
Fifth week	(Class on April 1st will be online/April 3rd will be in person) Problems with Voting, the Key Characteristic of Democratic Government Readings: "The Imprecision of Voting". Chapter 4.
Sixth week	Politicians and Politics: How Decisions are Made in a Group of Elected Officials Readings: "Elected Functionaries". Chapter 5.
Seventh week	Administrators and Administration: How Decision are Made in a Public Bureaucracy Review on Tuesday, April 15th MIDTERM EXAMINATION on Thursday, April 17th. Pencils, erasers, electronic and paper dictionaries, and extra paper allowed. NO CELL PHONES.
Eighth week	How do Bureaucrats make Policy? Is that even allowed? Readings: "Bureaucratic Policy Making". Chapter 6.
Ninth week	Interested Parties in Politics and Administration: How "Outsiders" Influence Policy Readings: "Interest Groups in Policy Making". Chapter 7. Groups for presentations announced. Discuss midterm results.
Tenth week	Week Ten: (May 6th is a Holiday—Buddha's Birthday/May 8th—Classes may be online) Businesses and their Role in Influencing Policy. Readings: "The Position of Business in Policy Making". Chapter 8.
Eleventh week	Week Eleven: (May 13th and 15th—Classes may be online) The Role of Parents in Teaching Us to Be Undemocratic. Readings: "Impaired Inquiry". Chapter 10.
Twelfth week	Combining the Strengths of Administration (Analysis) and Politics (Stewardship) Readings: "Making the Most of Analysis". Chapter 11.
Thirteenth week	What Can Go Wrong? The Weaknesses in Both Systems Readings: "Public Bureaucracy in Everyday Life", Chapter 1. Review of requirements for group presentations.
Fourteenth week	PRESENTATIONS
Fifteenth week	What have we learned? Review on Tuesday (June 10th if needed) Monday: FINAL EXAM (10:30 –11:45 am) Pencils, erasers, electronic and paper dictionaries, and extra paper allowed. NO CELL PHONES
Sixteenth week	Makeup classes as needed

[7] Assignments

The first assignment	assignment	Midterm exam	submission date	2025-04-17 Thu
	purpose	To assess progress and mastery of course concepts		
	procedure & notice	In class exam—closed book.		
	references	All course materials from weeks 1–6		
The second	assignment	Presentation	submission date	2025-06-02 Mon
	purpose	To learn how to make a persuasive presentation		

assignment	procedure & notice	Students will give in person presentations in English to the class.		
	references	Course instructions		
The third assignment	assignment	Final exam	submission date	2025-06-12 Thu
	purpose	To check final mastery of course concepts		
	procedure & notice	In class exam--closed book.		
	references	All course materials from Week 8 to 13		

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Comparative Public Administration	Course Number	CFB6007001
Major / School Year	Dept. of Public Administration / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration / 제시 캠벨	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-205:월(5B-6),수(7-8A)]
Office hours	TBA (and by appointment)	lecture room	

[1] Outline / Purpose

Comparative public administration approaches the key ideas of the field by examining their implementation in different contexts. National administrative contexts have both superficial and significant similarities and differences, and studying public administration from a comparative perspective can help provide administrators and managers with insight into how their own administrative systems function as well as the underlying factors that support positive reform. This course looks at some key ideas of public administration through a comparative lens. Additionally, many administrative systems will be examined in depth to give students a better understanding of how various systems converge and differ. The selection of cases will include both developed and developing countries from different geographic/cultural areas of the world.

[2] Course Learning Outcomes

By the end of this course, students should be able to:

- Better understand key ideas in the field of public administration
- Understand how various aspects of administrative systems differ across national (and other) contexts
- Discuss distinctive features of several different national systems
- Better understand the link between different administrative principles and ideas and performance

[3] Class Delivery Method

Detailed instructions will be provided in class about the following assignments:

Attendance (20%): Students are expected to attend all classes. Absences should be explained with a note from the relevant source.

Midterm and final interviews (20% each): In small groups, students will have face to face interviews with the professor where they will be asked to demonstrate their understanding of key readings from the lectures. Reviews will be provided.

In depth country analysis (20%): In small groups, students will make a presentation to the class about a particular administrative system. Relevant readings will be provided by the professor.

Comparative essay (20%): Students will write an essay comparing 2 administrative systems of their choice. Theory from the class should be intergraded into the essay.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Detailed instructions will be provided in class about the following assignments:

Attendance (20%): Students are expected to attend all classes. Absences should be explained with a note from the relevant source.

Midterm and final interviews (20% each): In small groups, students will have face to face interviews with the professor where they will be asked to demonstrate their understanding of key readings from the lectures. Reviews will be provided.

In depth country analysis (20%): In small groups, students will make a presentation to the class about a particular administrative system. Relevant readings will be provided by the professor.

Comparative essay (20%): Students will write an essay comparing 2 administrative systems of their choice. Theory from the class should be intergraded into the essay.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	The politics of bureaucracy: an introduction to comparative public administration by	Issued year	
(2)	Author		Publisher		Textbook	OECD: Government at a Glance	Issued year	

(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Additional readings will be provided by the professor.

[6] Weekly lesson plans

First week	Introduction to the course – Size, scope, and role of contemporary government
Second week	Government performance 1 – Bureaucratic characteristics and public service quality
Third week	Government performance 2 – Citizen satisfaction with government and public services
Fourth week	Public service delivery – The logic and reach of the New Public Management public service delivery model
Fifth week	Student research presentations
Sixth week	Compensation of public servants – Money and motivation in government and the public service ethic
Seventh week	Public participation and co-production – Understanding levels of citizen involvement and their impact on policy quality
Eighth week	Midterm examination
Ninth week	Corruption – Principal-agent and collective action models
Tenth week	Patronage bureaucracy – Risks and the responsiveness-competency trade-off
Eleventh week	Student research presentations
Twelfth week	Merit system – Weber and the foundations bureaucratic quality
Thirteenth week	Representative bureaucracy – Passive, active, and symbolic representation
Fourteenth week	Conclusion to the class and final review
Fifteenth week	Final examination
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Career Seminar I	Course Number	0010858001
Major / School Year	Dept. of Public Administration / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration / 타오	Grades/Lecture/ Practice	1 / 1 / 0
Phone Number		A weekday / class /	[13-102:목(7)]
Office hours		lecture room	

[1] Outline / Purpose

- 행정학과 학생들의 진로 취업 탐구 활동 지도를 통해 진로 계획의 구체화, 실행
- 팀 주제 탐구 활동을 통한 역량 강화

[2] Course Learning Outcomes

- 취업 및 대학원 진학 등의 자기진로 설계의 구체화
- 학생들의 역량(어학능력, 탐구능력 등)을 강화함으로써 취업 경쟁력 강화 및 취업을 향상

[3] Class Delivery Method

- 개인 데일리 학습(어학)
- 팀별 주제 탐구(발표, 토론, 세미나)

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	100 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	교과목 및 강의계획서 소개
Second week	진로 설정 팀 주제 설정
Third week	진로 장기 목표 설정 및 계획 팀별 주제 탐구 계획1
Fourth week	진로 단기 목표 설정 및 계획 팀별 주제 탐구 계획2
Fifth week	진로 단기 목표 실행1 팀 주제 탐구 계획 발표
Sixth week	진로 단기 목표 실행2 팀 주제 탐구 계획 발표 피드백
Seventh week	진로 단기 목표 실행3 팀 주제 탐구 계획 발표 피드백 반영 수정1
Eighth week	진로 단기 목표 실행4 팀 주제 탐구 계획 발표 피드백 반영 수정2
Ninth week	진로 단기 목표 실행 중간결과보고 팀 주제 탐구 진행1
Tenth week	진로 단기 목표 실행5 팀 주제 탐구 진행2
Eleventh week	진로 단기 목표 실행6 팀 주제 탐구 진행 중간보고
Twelfth week	진로 단기 목표 실행7 팀 주제 탐구 진행3
Thirteenth week	진로 단기 목표 실행8 팀 주제 탐구 진행4
Fourteenth week	진로 단기 목표 실행 결과보고 팀 주제 탐구 진행 피드백
Fifteenth week	팀 주제 탐구 진행 피드백 결과보고
Sixteenth week	마무리

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Classical Theories of International Relations	Course Number	0010069001
Major / School Year	Dept. of Political Science & Int'l Relations / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Political Science & Int'l Relations / 박요한	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-106:화(7-8A),수(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

This course is an advanced level reading seminar on Classical Theories of International Relations. You might find the reading loads are substantial but this is necessary for the course of this nature. Hence, be prepared to fully engage in this class.

This course is intended to offer a broad overview of theories and concepts related to international relations. This course is theoretical, as indicated in its name. You will find it very important to read the materials thoroughly and carefully. Each of the readings has provided fundamental insights for the development of International Relations as an academic discipline. Each of the reading also still gives us very important insights for our understanding of this 21 century international relations and globalization. Yet, you will still discover weaknesses, flaws, and/or inconsistencies in it. Try to grasp the main points of the readings and be prepared to evaluate the strengths and weaknesses.

[2] Course Learning Outcomes

This course also aims to increase your critical thinking, arguably the most essential skill in college education. Critical thinking includes, but not limited to, logical inference, pattern recognition, reading comprehension, effective writing and communication. The first step to achieve these goals is you thoroughly read the assigned readings before each class according to the course schedule. This course is an upper-level seminar course. Unlike lower level courses, it is not designed to be a one-way lecture from the instructor to students. Therefore, this course involves substantial participation from the students' side. That means the success of this course depends, to a great degree, on students' preparedness for weekly subjects and active participation. Active participation means not just showing up but thoughtfully answering questions and being respectful of the teacher and other students.

[3] Class Delivery Method

My lecture style is to ask students a lot of questions. Although time will be usually set aside for lecture, I expect you will come to class having completed the assigned readings and prepared to discuss the readings and lecture materials. The answers to these questions are found in class discussion between students and the professor. This in-class discussion makes up a good portion of the lecture materials that I wish to cover and will be included in the exams. I will give some extra credit opportunities during our lectures and discussions. So be prepared to be fully involved in class discussions.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Intro
Second week	Mencius
Third week	Hobbes
Fourth week	Locke
Fifth week	Rousseau
Sixth week	Kant
Seventh week	Smith/Schumpeter
Eighth week	Midterm exam
Ninth week	Malthus
Tenth week	Morgenthau
Eleventh week	Waltz
Twelfth week	Keohane/Nye
Thirteenth week	Wendt
Fourteenth week	Mearsheimer
Fifteenth week	Marx/Lenin
Sixteenth week	Final exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Great Power Politics	Course Number	0011433001
Major / School Year	Dept. of Political Science & Int'l Relations / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Political Science & Int'l Relations / 이경석	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-106:화(1-2A),수(1-2A)]
Office hours		lecture room	

[1] Outline / Purpose

Course Description

The global order faces a pivotal shift as US hegemony declines and new power centers emerge. This course examines contemporary great power politics, focusing on Sino-US strategic competition, the growing rivalry between democratic and authoritarian blocs, and the rising influence of Global South nations. We analyze how these dynamics reshape international institutions, economic relationships, and security architectures. The course explores how technological advancement, economic interdependence, and ideological competition affect great power behavior and global governance. Students will examine case studies of strategic competition in various domains including technology, trade, military capabilities, and diplomatic influence. Every week, the students will cover a specific topic about nuclear politics. In a given week, one day, the instructor will deliver a comprehensive lecture pertaining to the topic. On another day, students will conduct an in-depth discussion, applying the lecture to explain real-world examples.

[2] Course Learning Outcomes

Course Learning Outcomes

By the end of the course, students will:

- Apply theoretical frameworks to analyze great power competition
- Evaluate how economic interdependence shapes strategic rivalry
- Analyze the role of ideology in bloc formation and competition
- Assess the impact of emerging powers on global governance
- Understand how technology affects power transitions
- Identify key factors in Sino-US strategic competition
- Analyze Global South nations' strategic autonomy and influence
- Critically evaluate contemporary power transition challenges

[3] Class Delivery Method

Lecture-based

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	

(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 1: Introduction (3/4) Class Overview (3/5) Boroff, Alexander. 2020. "What is Great Power Competition Anyway?". Modern War Institute.
Second week	Week 2: Great Power Competition I (3/11 & 3/12) (3/11) Layne, Christopher. 1993. "The Unipolar Illusion: Why New Great Powers Will Rise." International Security 17(4): 5–51 (3/12): No class – School's foundation day
Third week	Week 3: Great Power Competition II (3/18 & 3/19) (3/18) Kupchan, Cliff. 2022 "Bipolarity is Back: Why It Matters" The Washington Quarterly 44(4), 123–139. (3/19) Ikenberry, G. John. 2018. "The End of Liberal International Order?" International Affairs 94(1): 7–23.
Fourth week	Week 4: The United States and the International Order I (3/25 & 3/26) (3/25) Mearsheimer, John. 2019. "Bound to fail: The Rise and Fall of the Liberal International Order". International Security 43(4): 7–50. (3/26) Lind, Jennifer and Press, Daryl G. 2020. "Reality Check. American Power in an Age of Constraints" Foreign Affairs 99(2):41–48 (3/26) Runde, Daniel. 2020. "Competing and Winning in the Multilateral System. U.S. Leadership in the United Nations." CSIS Report
Fifth week	Week 5: The United States and the International Order II (4/1 & 4/2) (4/1) Stokes, Doug. 2018. "Trump, American Hegemony and the Future of the Liberal International Order." International Affairs 94(1): 133–150. (4/2) Norrlof, Carla. 2018. "Hegemony and Inequality: Trump and the Liberal Playbook." International Affairs 94(1): 63–88.
Sixth week	Week 6: China and the International Order I (4/8 & 4/9) (4/8) Brooks, Stefan G. and Wohlforth, William C. 2015/16. "The Rise and Fall of the Great Powers in the Twenty-first Century: China's Rise and the Fate of America's Global Position". International Security 40(3): 7–53. (4/9) Johnston, Alastair Iain. "China in a World of Orders: Rethinking Compliance and Challenge in Beijing's international relations." International Security 44(2): 9–60.
Seventh week	Week 7: China and the International Order II (4/15 & 4/16) (4/15) Layne, Christopher. 2018. "The US–Chinese Power Shift and the End of the Pax Americana." International Affairs 94(1): 89–111. (4/16) Friedberg, Aaron. 2018. "Globalisation and Chinese Grand Strategy." Survival 60(1): 7–40.
Eighth week	Week 8: Midterm Exam (4/23)
Ninth week	Week 9: Russia and International Order I (4/29 & 4/30) (4/29) Sakwa, Richard. 2008 "New Cold War' or Twenty Years' crisis? Russia and International Politics." International Affairs 84(2): 241–267. (4/30) McFaul, Michael. 2020. "Putin, Putinism, and the Domestic Determinants of Russian Foreign Policy" International Security 45(2): 95–139
Tenth week	Week 10: Russia and International Order II (5/6 & 5/7) (5/6) Larson, Deborah Welch, and Alexei Shevchenko. 2010. "Status Seekers: Chinese and Russian Responses to US Primacy" International Security 34(4): 63–95. (5/7) Brands, Hal. 2018. "Democracy vs Authoritarianism: How Ideology Shapes Great-Power Conflict" Survival 60(5): 61–114.
Eleventh week	Week 11: Global South and International Order I (5/13 & 5/14) (5/13) Kahler, Miles (2013). "Rising powers and global governance: negotiating change in a resilient status quo" International Affairs 89(3): 711–729. (5/14) Gray, Kevin, and Barry K. Gills. 2016. "South–South cooperation and the rise of the Global South" Third World Quarterly 37(4): 557–574.
Twelfth week	Week 12: Global South and International Order II (5/20 & 5/21) (5/20) Shambaugh, David. 2018. "US–China Rivalry in Southeast Asia: Power Shift or Competitive Coexistence?" International Security 42(4): 85–127. (5/21) Ding, Sheng. 2008. "To build a "Harmonious World": China's Soft Power Wielding in

	the Global South" Journal of Chinese Political Science 13: 193–213.
Thirteenth week	Week 13: Great Power Rivalry: Wedging Strategy (5/27 & 5/28) (5/27) Crawford, Timothy. 2011. "Preventing Enemy Coalitions: How Wedge Strategies Shape Power Politics" International Security 35(4): 155–189. (5/28) Izumikawa, Yasuhiro. 2013. "To Coerce or Reward? Theorizing Wedge Strategies in Alliance Politics" Security Studies 22(3):498–531.
Fourteenth week	Week 14: Great Power Rivalry: Hedging Strategy (6/3 & 6/4) (6/3) Lim, Darren J., and Zack Cooper. 2015. "Reassessing hedging: The Logic of Alignment in East Asia" Security Studies 24(4): 696–727. (6/4) Cheng-Chwee, Kuik. 2008. "The Essence of Hedging: Malaysia and Singapore's Response to a Rising China." Contemporary Southeast Asia: A Journal of International and Strategic Affairs 30(2): 159–185.
Fifteenth week	Week 15: Final Exam (6/11)
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Research Methods in Political Science 2	Course Number	0008726001
Major / School Year	Dept. of Political Science & Int'l Relations / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Political Science & Int'l Relations / 이경석	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-101:화(7-8A)] [13-208:수(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

Course Description

This course introduces students to the analysis of quantitative data in political science research. This course aims to accomplish three main goals. First, to become an informed reader of quantitative information; second, to learn how to plan and execute the analysis of quantitative data; and third, to improve your proficiency in communicating quantitative information. This course is designed to cultivate students' capability to deal with quantitative data, analyze them, and interpret the results properly.

On Tuesday, the instructor will deliver a lecture pertaining to the theoretical foundation of each topic. On Wednesday, in a lab session, students will apply the theoretical knowledge to conduct data analysis.

Course Description

This course introduces students to the analysis of quantitative data in political science research. This course aims to accomplish three main goals. First, to become an informed reader of quantitative information; second, to learn how to plan and execute the analysis of quantitative data; and third, to improve your proficiency in communicating quantitative information. This course is designed to cultivate students' capability to deal with quantitative data, analyze them, and interpret the results properly.

[2] Course Learning Outcomes

Course Learning Outcomes

After taking this class, students should have acquired or improved the following abilities:

- understand quantitative information presented in social science research
- plan and executive statistical analyses of social science data
- communicate quantitative information effectively

Software

Students will learn codes for STATA and R

[3] Class Delivery Method

Course Grades

Your course grade will be based on the following items

- Research Proposal (30%)
- Final Research Paper (30%)
- Dataset (20%)
- Class Attendance (20%)
- Research Proposal (Including Thoery and Hypothesis) (30%)
 - A 6-8 pages research proposal that includes research question, literature review, theory and testable hypothesis
 - o Research question: X (IV) and Y (DV)
 - o Research question justification: Why my research question is important?
 - o Literature review
 - o Theory
 - o Hypothesis
- Final Research Paper (Including Empirical Results and Findings) (30%)
 - A 12-15 pages research paper that includes dataset, estimation strategy, empirical results, findings, discussion
 - o Introduction of data set: IV, DV, and control variables
 - o Estimation strategy: model explanation
 - o Empirical results: statistical findings
 - o Findings: support or reject my hypothesis
 - o Dissucssion: impliations of my findings
 - To refer an example for the project
 - o Lee, Kyung Suk. 2023. "The Microfoundations of Nuclear Proliferation: Evidence from South Korea" International Journal of Public Opinion Research
 - o Yewon Kwon and Kyung Suk Lee. 2024. "Inter-Korean Events and South Koreans' Perception on Unification: A Quantitative Analysis" Working Paper
- Dataset (20%)
 - The data quality decides the accuracy of empirical results. Students need to submite their own dataset. To find important dataset go to Korea Social Science Data Archive (KOSSDA), <https://kossda.snu.ac.kr/>
- Class Attendance (20%)

Latter Grade Distribution

This class adopts the absolute grading policy, which means students' grades would not be curved. The latter grade distributions are the following.

~ 90

A

80 ~ 89.99
70 ~ 79.99
60 ~ 60.99
59.99 ~

B
C
D
F

Late Work Policy

Late work will be penalized according to the following scheme.

- Within 24 hours after the assignment deadline: your maximum score will be 90%.
- More than 24 hours late: your maximum score will be 50%

Late work will be excused only in the case of university-excused absences. Work submitted by a student as makeup work for an excused absence is not considered late work and is exempted from the late work policy.

Re-Grading Policy

Students who want to appeal a grade on an exam or assignment must submit a written regrading request. This request must be turned in within five working days after the graded exams or assignments are returned to the class. The written statement must explain exactly why the student believes the current grade is incorrect. The entire assignment or exam will be re-graded; your grade may increase or decrease as a result.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 1 (3/4) Class Overview (3/5) Data Structure and Dataset Generation
Second week	Week 2 (3/11) Multivariate Regression Models (3/12) No class – School's foundation day
Third week	Week 3 (3/18) Logit Regression 1 (3/19) Lab session
	Week 4

Fourth week	(3/25) Logit Regression 2 (3/26) Lab session (3/26) First Dataset Due
Fifth week	Week 5 (4/1) Ordered Logit Regression Model (4/2) Lab session
Sixth week	Week 6 (4/8) Marginal Effects & Predicted Probabilities 1 (4/9) Lab session
Seventh week	Week 7 (4/15) Marginal Effects & Predicted Probabilities 2 (4/16) Lab session
Eighth week	Week 8 (4/23) Project Due (Theory and Hypothesis) (4/23) Final Dataset Due
Ninth week	Week 9 (4/29) Student Presentation 1 (Research Design) (4/30) Student Presentation 2 (Research Design)
Tenth week	Week 10 (5/6) Student Presentation 3 (Research Design) (5/7) Student Presentation 4 (Research Design)
Eleventh week	Week 11 (5/13) Student Presentation 1 (Empirical Results) (5/14) Student Presentation 2 (Empirical Results)
Twelfth week	Week 12 (5/20) Student Presentation 3 (Empirical Results) (5/21) Student Presentation 4 (Empirical Results)
Thirteenth week	Week 13 (5/27) Project Clinic 1 (5/28) Project Clinic 2
Fourteenth week	Week 14 (6/3) Project Clinic 3 (6/4) Project Clinic 4
Fifteenth week	Week 15 (6/11) Project Due (Empirical Results and Interpretation)
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Big Data and Politics	Course Number	0011434001
Major / School Year	Dept. of Political Science & Int'l Relations / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Political Science & Int'l Relations / 우병득	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-106:화(8B-9),목(8B-9)]
Office hours		lecture room	

[1] Outline / Purpose

As the importance of big data increases, the role of data science continues to be emphasized. In this lecture, students will learn the basic concepts of natural language processing, text analysis techniques, and deep learning, such as data collection techniques such as web scraping and web crawling, and latent Dirichlet allocation, starting with R and Python. By using these analysis techniques, students will have the experience of discovering problems that exist in various areas of society and suggesting solutions.

As mentioned earlier, in online classes, students will be able to understand the basic theories and discussions about big data and politics. Additionally, in offline classes, students will have time to review the online class content again and practice practical text analysis and data visualization based on the knowledge that students have acquired. Through this process, students will be able to organically connect big data and politics and use big data to diagnose and solve political problems.

[2] Course Learning Outcomes

Big Data has been received wide academic attention from scholars with the advance of data science. By delivering basic knowledge on Big Data, this course aims to make students understand the relationship between Big Data and Politics, the importance of Big Data, and ways to apply Big Data Analytics to examine Political Science. We will learn about the importance of big data, visualization, text analysis, and visual analysis. At the same time, we will apply text analysis to employ big data analytics into politics.

At the end of this course, students will be able to 1) Understand the importance of big data, 2) Be able to visualize data, 3) Be able to use Python for big data analytics, 4) Understand logics of text and visual analysis, and 5) Be able to conduct text analysis.

[3] Class Delivery Method

Online class will be proceeded with power point slides prepared by the professor. The PPT slides will be shared to students every week to facilitate the learning mechanisms among students. Moreover, reading materials such as academic articles, new papers, and book chapters will also be provided. Even though there is no main text book, recommended text books will be suggested to students during the semester. The online lecture is to efficiently provide knowledge about Big Data Analytics and computations social science. In the online lecture, students will learn about feature of Big Data Analytics, Data Analysis Packages, Replication Crisis, Visualization, OLS regression model, etc.

Offline class of this course will be focused on the practice of analysis. Students are required to attend offline class with their own laptops. Based on the background knowledge they received by listening online class, students will conduct text analysis such as the Latent Dirichlet Allocation, web-scraping, and machine-learning in the offline class. In addition to the text analysis, students will also learn about how to draw maps and graphs regarding their research and analysis. In the offline class, data analysis packages such as Python, R, and STATA are used along with power point slides prepared by the professor.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Introduction Introduction to Big Data Impact of Big Data on Politics
Second week	Review on Political Methodology Big Data Analytics and Computational Social Science Features of Big Data Analytics
Third week	Data Analysis Packages (Python, R, and STATA) Replication Crisis Prepare Analytic Packages
Fourth week	Understanding Visualization Understanding OLS Regression Visualization Practice (1)
Fifth week	Understanding Non-linearity Understanding Trend and Time Visualization Practice (2)
Sixth week	Introduction to Text Analysis Web Scraping and Word Cloud Practice of Text Analysis (1)
Seventh week	Practice of Text Analysis (2) Generating Research Question from Text Analysis Examples of Research Question about Text Analysis and Politics
Eighth week	Mid-Term Week
Ninth week	Latent Dirichlet Allocation: Theory and Algorithm Latent Dirichlet Allocation: Examples (1) Latent Dirichlet Allocation: Examples (2)
Tenth week	Latent Dirichlet Allocation: Diagnostic Tests Latent Dirichlet Allocation: Visualization and Practice (1) Latent Dirichlet Allocation: Visualization and Practice (2)
Eleventh week	Sentiment Analysis: Theory and Algorithm Sentiment Analysis: Examples (1) Sentiment Analysis: Examples (2)
Twelfth week	Sentiment Analysis: Diagnostic Tests Sentiment Analysis: Visualization and Practice (1) Sentiment Analysis: Visualization and Practice (2)
Thirteenth week	Deep Learning: Theories and Examples Visual Analysis: Theories and Examples (1) Visual Analysis: Theories and Examples (2)
Fourteenth week	Individual Presentation about Final Paper (1,2,3)
Fifteenth week	Final Exam Week
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Nuclear Politics	Course Number	0011435001
Major / School Year	Dept. of Political Science & Int'l Relations / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Political Science & Int'l Relations / 이경석	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-106:화(2B-3),수(4-5A)]
Office hours		lecture room	

[1] Outline / Purpose

Course Description

The international system could be divided into pre-nuclear and post-nuclear periods. Nuclear weapons are the most destructive military technology ever invented. Nuclear politics, therefore, was central to the Cold War era but still has a significant impact on the international system. Then, why do countries pursue nuclear weapons? What is the effect of nuclear weapons on international conflict and foreign policy? What are the driving forces of nuclear proliferation? How does the international community cooperate in curbing proliferation? How does military alliance affect nuclear politics? Is nuclear arms control possible? What are the domestic causes of nuclear proliferation? This course is designed to answer these questions and broaden the scope of knowledge with respect to nuclear politics.

Every week, the students will cover a specific topic about nuclear politics. In a given week, one day, the instructor will deliver a comprehensive lecture pertaining to the topic. On another day, students will conduct an in-depth discussion, applying the lecture to explain real-world examples.

[2] Course Learning Outcomes

Course Learning Outcomes

The purposes of the class are to understand crucial topics in nuclear politics, such as nuclear proliferation, deterrence, strategic stability, arms control, and disarmament. Also, this class aims to cultivate the critical thinking capability to analyze international affairs related to nuclear politics. By the end of the course, students will

- Understand the basics of evaluating arguments using social science tools
- Analyze why states want to pursue nuclear weapons
- Analyze how nuclear weapons affect international conflicts
- Identify why some countries pursue the bomb, but others do not
- Understand the role of the international community in nuclear politics
- Understand the domestic factors that drive nuclear proliferation
- Critically evaluate the contemporary nuclear challenges

[3] Class Delivery Method

Readings

There are no required textbooks in this course. You will read journal articles and book chapters. To download articles, use Google Scholar (<https://scholar.google.com/>) or INU library website (<https://lib.inu.ac.kr/mylibrary/dashboard>). I strongly encourage you to finish the readings before the start of the class period to which it is assigned.

Course Materials

All class materials, syllabus, notes, and assignments will be posted on E-learning.

Course Grades

Your course grade will be based on the following items

- Midterm exam (20%)
- Final exam (30%)
- Short Q&A Session (10%)
- Class Participation & Discussion (20%)
- Class Attendance (20%)

- Midterm exam (20%)

The midterm exam will cover materials from Part I of the course.

- Final exam (30%)

The final exam will cover all of the materials from the course.

The exams cover the materials from the assigned readings and notes discussed in the class.

- Short Q&A Session (10%)

At the beginning of the class, all students will do a short Q&A session with the instructor pertaining to the designated reading materials. Each student can arbitrarily choose three articles to prepare a 3~5-minute Q&A session. The students need to prepare the following points. (1) Research question of the article, (2) main arguments of the article, (3) mechanism and specific logic of the article, (4) quantitative or qualitative evidence of the article. This presentation would play a critical role for the class because it provides an overview and analysis of the articles to the classmates.

The specific grading portions are based on the following 4-point scale.

- 3: The presentation fully included the key four components of the article
- 2: The presentation partially included the key four components of the article
- 1: The presentation lacked the key four components of the article
- 0: The student did not prepare a presentation

- Class Participation & Discussion (20%)

I expect the students will share their thoughts and provide constructive feedback to their colleagues. I will record participation scores at the end of each class based on the following 4-point scale.

- 3: The student provided at least one constructive comment on the paper (topic) that was discussed during a given class period.

- 2: The student commented on between 50 and 99 percent of the paper (topic) that was discussed during a given class period.
- 1: The student participated but commented on fewer than 50 percent of the paper (topic) that was discussed during a given class period.
- 0: The student did not participate at all.
- Class Attendance (20%)

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

④ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 1: Introduction (3/4) Class Overview (3/5) How to read a research paper
Second week	Week 2: Nuclear Proliferation I: Holistic Analysis (3/11 & 3/12) Sagan, Scott D. 1996/97 "Why do States Build Nuclear Weapons?: Three Models In Search of a Bomb." International Security 21(3): 54-63. (3/12): No class – School's foundation day
Third week	Week 3: Nuclear Proliferation II: Holistic Analysis (3/18 & 3/19) Jo, Dong-Joon, and Erik Gartzke. 2007. "Determinants of Nuclear Weapons Proliferation." Journal of Conflict Resolution 51(1): 167-194. Narang, Vipin. 2022. Seeking the Bomb: Strategies of Nuclear Proliferation. New Jersey: Princeton University Press, Chapter 2: Strategies of Nuclear Proliferation and Their Sources
Fourth week	Week 4: Nuclear Proliferation III: Holistic Analysis (3/25 & 3/26) Monteiro, Nuno, and Alexandre Debs. 2014. "The strategic logic of nuclear proliferation." International Security 39(2): 7-51. Gavin, Francis. 2015. "Strategies of Inhibition: US grand strategy, the Nuclear revolution, and Nonproliferation." International Security 40(1): 9-46. Suggested Readings Coe, Andrew J., and Jane Vaynman. 2015. "Collusion and the Nuclear Nonproliferation Regime." The Journal of Politics 77(4): 983-997.
	Week 5: Nuclear Proliferation IV: Supply Side Analysis (4/1 & 4/2)

Fifth week	Kroenig, Matthew. 2009. "Exporting the bomb: Why states provide sensitive nuclear assistance." <i>American Political Science Review</i> 103(1): 113–133. Fuhrmann, Matthew. 2009. "Spreading temptation: Proliferation and peaceful nuclear cooperation agreements." <i>International Security</i> 34(1): 7–41.
Sixth week	Week 6: Nuclear Proliferation V: Political Leaders (4/8 & 4/9) Schneider, Jonas. 2020. "The Study of Leaders in Nuclear Proliferation and How to Reinvigorate it." <i>International Studies Review</i> 22(1): 1–25. Hymans, Jacques. 2006. <i>The Psychology of Nuclear Proliferation</i>. Cambridge: Cambridge University Press, Chapter 1–2: Introduction: Life in a Nuclear–Capable Crowd & Leaders' National Identity Conceptions and Nuclear Choices Suggested Readings Lee, Kyung Suk. 2025 "Who follows Whom?: Non–elected Elite Responsiveness to Public Support for Nuclear Weapons" Working Paper Fuhrmann, Matthew, and Michael C. Horowitz. 2015. "When leaders matter: Rebel experience and nuclear proliferation." <i>The Journal of Politics</i> 77(1): 72–87. Way, Christopher, and Jessica Weeks. 2014. "Making it personal: regime type and nuclear proliferation." <i>American Journal of Political Science</i> 58(3):705–719 Miller, Nicholas L. 2014. "The Secret Success of Nonproliferation Sanctions." <i>International Organization</i> 68(4): 913–944.
Seventh week	Week 7: Nuclear Proliferation VI: Public Opinion (4/15 & 4/16) Lee, Kyung Suk. 2023. "The Microfoundations of Nuclear Proliferation: Evidence from South Korea." <i>International Journal of Public Opinion Research</i>, 35(4): edad033 Lee, Kyung Suk and Sangmi Jeong. 2025. "Mapping the Complex Terrain of Public Nuclear Proliferation Beliefs: Evidence from a Conjoint Experiment in South Korea" Working Paper Suggested Readings Lee, Kyung Suk. 2024. "South Korean Cost Sensitivity and Support for Nuclear Weapons." <i>International Interactions</i>, 50(3): 506–536 Sukin, Lauren. 2020. "Credible Nuclear Security Commitments Can Backfire: Explaining Domestic Support for Nuclear Weapons Acquisition in South Korea." <i>Journal of Conflict Resolution</i> 64(6): 1011–1042.
Eighth week	Week 8: Midterm Exam (4/23)
Ninth week	Week 9: Nuclear Deterrence I (4/29 & 4/30) Schelling, Thomas. 1966. <i>Arms and Influence</i>. New Haven, CT: Yale University Press, Chapter 3: The Manipulation of Risk Lieber, Keir A. and Daryl Press. 2020. <i>The Myth of the Nuclear Revolution: Power Politics in the Atomic Age</i>. Ithaca, NY: Cornell University Press, Chapter 1: Power Politics in the Nuclear Age Suggested Readings Pauly, Reid BC, and Rose McDermott. 2022. "The psychology of nuclear Brinkmanship." <i>International Security</i> 47(3): 9–51. Beardsley, Kyle, and Victor Asal. 2009a. "Nuclear Weapons as Shields." <i>Conflict Management and Peace Science</i> 26(3): 235–55. Beardsley, Kyle, and Victor Asal. 2009b. "Winning with the Bomb." <i>Journal of Conflict Resolution</i> 53(2): 278–301.
Tenth week	Week 10: Nuclear Deterrence II (5/6 & 5/7) Lieber, Keir A. and Daryl Press. 2020. <i>The Myth of the Nuclear Revolution: Power Politics in the Atomic Age</i>. Ithaca, NY: Cornell University Press, Chapter 2: Getting the Stalemate: How Much Is Enough Snyder, Glenn. 1960. "Balance of Power in the Missile Age" <i>Journal of International Affairs</i> 14(1): 21–34 Suggested Readings Lieber, Keir A. and Daryl Press. 2020. <i>The Myth of the Nuclear Revolution: Power Politics in the Atomic Age</i>. Ithaca, NY: Cornell University Press, Chapter 3. Lieber, Keir A. and Daryl Press. 2020. <i>The Myth of the Nuclear Revolution: Power Politics in the Atomic Age</i>. Ithaca, NY: Cornell University Press, Chapter 4.
Eleventh week	Week 11: Nuclear Deterrence III (5/13 & 5/14) Early, Bryan and Victor Asal. 2018. "Nuclear Weapons, Existential Threats, and the Stability–Instability Paradox." <i>The Nonproliferation Review</i> 25(3–4): 223–247. Lee, Kyung Suk, James Kim, Hwalmin Jin, and Matthew Fuhrmann. 2022. "Nuclear Weapons and Low–Level Military Conflict" <i>International Studies Quarterly</i> 66(4): sqac067. Suggested Readings Bell, Mark S., and Nicholas L. Miller. 2015. "Questioning the Effect of Nuclear Weapons on Conflict." <i>Journal of Conflict Resolution</i> 59(1): 74–92.
Twelfth week	Week 12: Nuclear Deterrence VI (5/20 & 5/21) Narang, Vipin. 2010. "Posturing for Peace? Pakistan's Nuclear Postures and South Asian Stability." <i>International Security</i> 34(3): 38–78. Fuhrmann, Matthew, and Todd S. Sechser. 2014. "Signaling Alliance Commitments: Hand–Tying and Sunk Costs in Extended Nuclear Deterrence." <i>American Journal of Political Science</i> 58(4): 919–935.

Thirteenth week	Week 13: Nuclear Coercion I (5/27 & 5/28) Kroenig, Matthew. 2013. "Nuclear Superiority and the Balance of Resolve: Explaining Nuclear Crisis Outcomes." <i>International Organization</i> 67(1): 141–171 Bell, Mark S. 2019. "Nuclear Opportunism: A Theory of How States Use Nuclear Weapons in International Politics." <i>Journal of Strategic Studies</i> 42(1): 3–28. Suggested Readings Fanlo, Abby, and Lauren Sukin. 2023. "The Disadvantage of Nuclear Superiority." <i>Security Studies</i> 32(3): 446–475.
Fourteenth week	Week 14: Nuclear Coercion II (6/3 & 6/4) Sechser and Fuhrmann. 2017. <i>Nuclear Weapons and Coercive Diplomacy</i>. Cambridge: Cambridge University Press, Chapter 2: Nuclear Coercion and Nuclear Skepticism Sechser, Todd S., and Matthew Fuhrmann. 2013. "Crisis Bargaining and Nuclear Blackmail." <i>International Organization</i> 67(4): 173–95.
Fifteenth week	Week 15: Final Exam (6/11)
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MANAGEMENT	Course Number	KB02001002
Major / School Year	Division of International Trade / 1	completion division /Grade evaluation	/
Department/Professor	Division of International Trade / 이루리	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[14-114:화(8B-9),목(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

The main objective of this course is to provide a basic understanding of the contemporary business world. This course provides students with a general framework to develop an understanding of how businesses work, how they are organized and managed, and how they are changing depending on recent challenging business environments. This course covers the environments businesses operate in, general principles of management and leadership, and the general functional areas of business (e.g., marketing, information systems, operations, and finance). The course materials provide the fundamentals necessary for students who pursue their careers in business.

[2] Course Learning Outcomes

This course is designed to facilitate student learning by providing an opportunity to:

1. Understand in-depth theory and principles of business.
2. Explore practices of business in the field.
3. Improve critical thinking and communication skills in business communication.

[3] Class Delivery Method

This course is English and offline class. This course is mainly lecture-based, but students are strongly encouraged to participate in discussions in each class (Extra credit for participation will be given). Lecture notes will be uploaded each week on e-learning site (cyber.inu.ac.kr) and students are expected to download them and to be prepared before the class. Offline classes will be replaced with online video lectures on holidays (6 May). Students are highly required to attend the first week of the class not to miss important notices and guidelines for the course.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	10 %	0 %	0 %	0 %	0 %	0 %	10 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
5 %	0 %	0 %	0 %	0 %	0 %	95 %	0 %

[4] Grading Policies

Attendance 20%

In-class quiz (5 times) 50%

Homework assignment (2 times) 30%

*Extra credit will be given for participation in class discussions.

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Ebert, R.J. & Griffin, R.W.	Publisher	Pearson	Textbook	Business Essentials (Twelfth/Global edition)	Issued year	2019
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Ebert, R.J. & Griffin, R.W.	Publisher	교문사	Textbook	Griffin 경영학원론 (12판)	Issued year	2022
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction *Submit a self-introduction sheet (6 March)
Second week	Global business & Business environment (1)
Third week	Global business & Business environment (2)
Fourth week	Business ethics and social responsibility *Quiz (1)
Fifth week	Managing the business
Sixth week	Organizing the business
Seventh week	People in organizations (1) *Quiz (2)
Eighth week	Homework assignment (1) (Midterm period, no class)
Ninth week	People in organizations (2)
Tenth week	Operations *Online video lecture (6 May) *Quiz (3)
Eleventh week	Marketing (1)
Twelfth week	Marketing (2) *Quiz (4)
Thirteenth week	Information systems
Fourteenth week	Finance *Quiz (5)
Fifteenth week	Homework assignment (1) (Final exam period, no class)
Sixteenth week	The above class schedule can be subject to change depending on circumstances.

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	CUSTOMER SERVICE	Course Number	0007945001
Major / School Year	/ 1	completion division / Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[05-524:목(5B-6)] [ZZ-200:월(0A1-2A)]
Office hours			

[1] Outline / Purpose

(중요) 본 강의는 온오프 혼합형 강의입니다.

This course provides students with basic concepts and current trends in the customer service industry (e.g., banks, educational institutions, hospitals, hotels, professional services, transportation companies). Special areas of emphasis include problem-solving, development of a customer service strategy, creating customer service systems, service recovery, coping with challenging customers, customer retention, and measuring satisfaction.

[2] Course Learning Outcomes

Upon completion of this course, students should be able to:

1. Define customer service.
2. Understand customer retention and various methods of measuring customer satisfaction.
3. Discuss the relationship between strategy and empowerment.
4. Understand the concept of service recovery.
5. Express an understanding of how to cope with those individuals whom they find to be challenging.
6. Discuss the relationship between leadership and motivation in customer service.

[3] Class Delivery Method

Course format includes lectures, class and group discussions, small group exercises, guest speaker group presentations, and media presentations. Active participation and involvement are essential for the best learning experience and success in the course.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
80 %	20 %	0 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Elaine K. Harris	Publisher		Textbook	Customer Service: A Practical Approach (6th Edition)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Overview Introduction to Service
Second week	What is Customer Service? Ch.1
Third week	The Challenges of Customer Service Ch.2
Fourth week	Problem Solving Ch.3
Fifth week	Strategy for Formulating a Plan for Success Ch.4
Sixth week	Empowerment Ch.5
Seventh week	Communications in Customer Service Ch.6
Eighth week	Exam 1
Ninth week	Coping with Challenging Customers Ch.7
Tenth week	Motivation Ch.8
Eleventh week	Leadership in Customer Service Ch.9
Twelfth week	Customer Retention and Measurement of Satisfaction Ch.10
Thirteenth week	Technology and Customer Service Ch.11
Fourteenth week	Excellence in Customer Service Ch.12
Fifteenth week	Exam 2
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	CALCULUS(1)	Course Number	XAA1358021
Major / School Year	Dept. of Mechanical Engineering / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 권재성	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-386:화(1-2A),수(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

많은 물리법칙과 관계들이 수학적으로는 미분방정식의 형태로 표현될 수 있으며, 실제로 많은 공학적 문제들이 미분방정식으로 나타납니다. 따라서 공학시스템들의 고유특성과 행동패턴들을 근사적으로 풀이하기 위해서는 미분방정식의 해를 반드시 구할 수 있어야 합니다. 본 "대학수학1"에서는 수강생들이 미분방정식을 이해하고 그와 관련된 풀이법들을 습득하기 위해 다음과 같은 기초지식들을 배웁니다: 극한, 미분법, 도함수, 적분, 초월함수, 무한수열, 급수, 상미분 방정식

[2] Course Learning Outcomes

"대학수학1"은 한학기동안 미분방정식을 풀이하는데 필요한 기초지식들을 다룹니다. 그 기초지식들은 극한, 미분법, 도함수, 적분, 초월함수, 무한수열 등을 포함합니다. 본 강의를 통해 수강생들은 자연계에서 관찰되는 여러 현상들을 미분방정식으로 모델링하고 그것을 풀이할 수 있는 능력을 배양합니다.

[3] Class Delivery Method

1. 본 대학수학(1) 강의는 온라인(동영상)+오프라인 수업을 병행하는 방식으로 진행됩니다.
2. 온라인(동영상)강의를 위해 매주 강의 3시간에 해당하는 동영상 및 슬라이드 자료들을 인천대 이러닝 웹사이트 LMS시스템(cyber.inu.ac.kr)에 미리 업로드해 놓을 것입니다. 따라서 수강생들은 오프라인 수업에 오기 전 그 온라인 자료들을 완벽히 시청하여야 합니다. 오프라인 수업은 온라인 자료에 대한 수강생들의 질의와 답변, 그리고 관련예제들의 풀이를 하는 시간으로 구성됩니다.
3. 온라인 동영상은 시간표에 정해진 수업시간에 맞춰 접속하여 시청해야만이 LMS상에 출석으로 기록되며, 수업시간 이외에 접속하여 시청할 경우 아무리 100%시청했다 하더라도 출석으로 간주되지 않으니 이점 반드시 유념해주길 바랍니다.
4. 본 강의는 원어강의입니다. 그러나 대학수학(1)에 대한 수강생들의 이해를 드높이기 위하여 온라인 동영상에서 구두로 전달하는 내용에 대해서는 한국어로 사용하기로 하되, 그 외 수업자료, 과제, 시험문제, 오프라인 수업 등에서는 영어를 사용할 것입니다.
5. 수업과 관련된 공지사항들은 모두 LMS웹사이트상에 게시할 것입니다. 개강전까지 LMS시스템에 접속하여 본인의 개인연락처를 반드시 확인하고, 잘못된 정보가 기록되어 있을 경우 반드시 수정해주길 바랍니다. 별도의 공지가 없다고 하더라도 주기적으로 LMS 사이트를 체크하여 본인의 수업과 학습에 지장이 없도록 해주길 바랍니다.
6. 시험은 2회(중간고사, 기말고사) 치뤄지며, 대면방식으로 치뤄집니다.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	0 %	50 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	20 %	0 %	30 %	0 %	0 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	J.R.Hass et al.	Publisher	Pearson	Textbook	University Calculus (14th edition) (영문판)	Issued year	
(2)	Author	J.R.Hass et al.	Publisher	청문각	Textbook	미분적분학 (14판) (국문판)	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Class orientation Chap.1 Functions
Second week	Chap.2 Limits and Continuity
Third week	Chap.3 Derivatives (1)
Fourth week	Chap.3 Derivatives (2)
Fifth week	Chap.4 Applications of Derivatives
Sixth week	Chap.5 Integrals
Seventh week	Chap.6 Applications of Definite Integrals
Eighth week	Mid-term exam
Ninth week	Chap.7 Integrals and Transcendental Functions
Tenth week	Chap.8 Techniques of Integration
Eleventh week	Chap.9 Infinite Sequences and Series (1)
Twelfth week	Chap.9 Infinite Sequences and Series (2)
Thirteenth week	Ordinary Differential Equation (1)
Fourteenth week	Ordinary Differential Equation (2)
Fifteenth week	Final-term exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	CALCULUS(1)	Course Number	XAA1358022
Major / School Year	Dept. of Mechanical Engineering / 1	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 권재성	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-386:월(2B-3),수(1-2A)]
Office hours		lecture room	

[1] Outline / Purpose

많은 물리법칙과 관계들이 수학적으로는 미분방정식의 형태로 표현될 수 있으며, 실제로 많은 공학적 문제들이 미분방정식으로 나타납니다. 따라서 공학시스템들의 고유특성과 행동패턴들을 근사적으로 풀이하기 위해서는 미분방정식의 해를 반드시 구할 수 있어야 합니다. 본 "대학수학1"에서는 수강생들이 미분방정식을 이해하고 그와 관련된 풀이법들을 습득하기 위해 다음과 같은 기초지식들을 배웁니다: 극한, 미분법, 도함수, 적분, 초월함수, 무한수열, 급수, 상미분 방정식

[2] Course Learning Outcomes

"대학수학1"은 한학기동안 미분방정식을 풀이하는데 필요한 기초지식들을 다룹니다. 그 기초지식들은 극한, 미분법, 도함수, 적분, 초월함수, 무한수열 등을 포함합니다. 본 강의를 통해 수강생들은 자연계에서 관찰되는 여러 현상들을 미분방정식으로 모델링하고 그것을 풀이할 수 있는 능력을 배양합니다.

[3] Class Delivery Method

- 본 강의는 오프라인 대면방식으로 진행됩니다.
- 오프라인 강의에 대한 사전예습을 위해 매주 강의 3시간에 해당하는 동영상 및 슬라이드 자료들을 인천대 이러닝 웹사이트 LMS 시스템(cyber.inu.ac.kr)에 미리 업로드해 놓을 것입니다. 따라서 수강생들은 오프라인 수업에 오기 전 그 온라인 자료들을 완벽히 시청하여야 합니다. 오프라인 수업은 사전예습 강의를 보강하는 한편, 수강생들의 질의와 답변, 그리고 관련예제들의 풀이를 하는 시간으로 구성됩니다.
- 본 강의는 원어강의입니다. 그러나 대학수학(1)에 대한 수강생들의 이해를 드높이기 위해 사전예습 동영상에서 구두로 전달하는 내용에 대해 한국어로 사용하기로 하되, 그 외 수업자료, 과제, 시험문제, 오프라인 수업 등에서는 영어를 사용할 것입니다.
- 수업과 관련된 공지사항들은 모두 LMS웹사이트상에 게시할 것입니다. 개강전까지 LMS시스템에 접속하여 본인의 개인연락처를 반드시 확인하고, 잘못된 정보가 기록되어 있을 경우 반드시 수정해주길 바랍니다. 별도의 공지가 없다고 하더라도 주기적으로 LMS 사이트를 체크하여 본인의 수업과 학습에 지장이 없도록 해주길 바랍니다.
- 시험은 2회(중간고사, 기말고사) 치뤄지며, 대면방식으로 치뤄집니다.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	0 %	50 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	20 %	0 %	30 %	0 %	0 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	J.R.Hass et al.	Publisher	Pearson	Textbook	University Calculus (14th edition) (영문판)	Issued year	
(2)	Author	J.R.Hass et al.	Publisher	청문각	Textbook	미분적분학 (14판) (국문판)	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Class orientation Chap.1 Functions
Second week	Chap.2 Limits and Continuity
Third week	Chap.3 Derivatives (1)
Fourth week	Chap.3 Derivatives (2)
Fifth week	Chap.4 Applications of Derivatives
Sixth week	Chap.5 Integrals
Seventh week	Chap.6 Applications of Definite Integrals
Eighth week	Mid-term exam
Ninth week	Chap.7 Integrals and Transcendental Functions
Tenth week	Chap.8 Techniques of Integration
Eleventh week	Chap.9 Infinite Sequences and Series (1)
Twelfth week	Chap.9 Infinite Sequences and Series (2)
Thirteenth week	Ordinary Differential Equation (1)
Fourteenth week	Ordinary Differential Equation (2)
Fifteenth week	Final-term exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Engineering Mathematics 1	Course Number	0001208001
Major / School Year	Dept. of Mechanical Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[09-226:월(2B-3),화(8B-9)]
Office hours			

[1] Outline / Purpose

Engineering Mathematics 1 is a foundational subject that equips students with mathematical techniques essential for solving engineering problems. The purpose of the subject is the study of various ordinary differential equations and their most important methods for solving them and the study of modeling.

[2] Course Learning Outcomes

Upon successful completion of the Engineering Mathematics 1 course, students will be able to:

- Identify and classify ordinary differential equations (ODEs) based on order, linearity, and type.
- Formulate and analyze mathematical models involving ODEs in engineering applications such as mechanical vibrations, control systems, and fluid dynamics.
- Utilize Laplace transforms and their inverses to solve initial value problems and systems of differential equations.

[3] Class Delivery Method

Lecture-Based Teaching (Traditional + Interactive Approach):

- Use PowerPoint presentations to explain theoretical concepts and derivations.
- Incorporate real-world engineering examples to illustrate the practical applications of ODEs.
- Encourage student participation through questions and discussions.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

mid-term exam: 30%

final exam: 30%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Erwin Kreyszig	Publisher	Wiley	Textbook	Advanced Engineering Mathematics, 10th edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Ch.1 First Order ODEs
Second week	Ch.1 First Order ODEs
Third week	Ch.2 Second-Order Linear ODEs
Fourth week	Ch.2 Second-Order Linear ODEs
Fifth week	Ch.2 Second-Order Linear ODEs
Sixth week	Ch.3 Higher Order Linear ODEs
Seventh week	Mid-term Exam
Eighth week	Ch.4 Systems of ODEs, Phase Plane, Qualitative Methods
Ninth week	Ch.4 Systems of ODEs, Phase Plane, Qualitative Methods
Tenth week	Ch.5 Series Solutions of ODEs. Special Functions.
Eleventh week	Ch.5 Series Solutions of ODEs. Special Functions.
Twelfth week	Ch.6 Laplace Transforms
Thirteenth week	Ch.6 Laplace Transforms
Fourteenth week	Ch.6 Laplace Transforms
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	SOLID MECHANICS(1)	Course Number	0002806002
Major / School Year	Dept. of Mechanical Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 구상모	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-272:화(5)(6),수(1)]
Office hours		lecture room	

[1] Outline / Purpose

고체역학은 인장, 압축, 전단, 굽힘 및 비틀림 등의 하중을 받고 있는 기계구조의 거동을 취급하는 응용역학의 한 분야로서 재료강도학 또는 변형체 역학이라고도 한다. 특히, 고체역학은 기계 및 구조물 설계 시 가장 핵심적 과목으로, 수업목적은 각종 하중을 받는 기계 구조물에 작용하는 응력(stress)과 변형률(strain) 및 변형량을 해석하는 방법론을 숙지케하여 실제 기계계나 구조물을 설계하는 능력을 배양하는데 있다.

(No allowance of enrollment for Foreign students and exchange students)

[2] Course Learning Outcomes

고체역학1에서는 아래의 내용을 숙지하도록 하여 구조물이나 기계의 설계능력을 배양한다.

1. 힘과 모멘트(moment) 및 평형조건
2. 축하중(인장력, 압축력), 전단력 등에 의한 응력, 변형률
3. 축하중에 의한 구조물의 변형
3. 축(shaft) 부재에 작용하는 비틀림모멘트에 의한 응력, 변형률, 변형
4. 응력과 변형률의 해석
5. Mohr의 원(circle)

[3] Class Delivery Method

수업방법 :

비대면 수업주차 : 1, 2주차 (코로나19로 인해 우선 1주차와 2주차에 대해서는 동영상 강의 방식으로 비대면수업 진행)

- 업로드 된 동영상 강의자료를 이용한 수업 진행
- 수업내용에 대한 문의사항은 이메일 (skoo@inu.ac.kr)을 이용하여 문의

1. 역학의 제 법칙에 대한 물리적 개념의 확립에 중점을 둔 강의 진행
2. 힘과 응력, 변형률, 변형에 대한 이론적 해석방법에 대한 강의
3. 해석방법에 대한 사례중심, 예제문제 풀이 중심 강의
4. 실제 기계계나 구조물에 대한 해석방법 및 해석결과 고찰 방법 강의
5. 과제물을 통한 수업내용에 대한 이해도 측정 병행

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	10 %	0 %	0 %	10 %	0 %	0 %	0 %

④ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	80 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	곽문규, 구상모, 김경표, 김철래, 유영찬, 이영욱, 이희영, 옮김	Publisher	교문사	Textbook	Gere 정역학과 재료역학	Issued year	2022
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	J. M. Gear 외	Publisher	CENGAGE Learning	Textbook	SI 재료역학(8판)	Issued year	2016
(2)	Author	J. M. Gear 외	Publisher	CENGAGE Learning	Textbook	Mechanics of Materials	Issued year	2016

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	교과목 소개 1. 고체역학의 기본개념 2. 고체역학의 필요성 및 목적 3. 고체역학과 설계의 상관 관계
Second week	제1장 인장, 압축, 전단 1. 정력학 복습 2. 힘, 모멘트의 개념 3. 힘의 평형조건
Third week	제1장 인장, 압축, 전단 1. 자유물체도의 개념과 작성법 2. 정역학 문제풀이 3. 수직응력과 변형률
Fourth week	제1장 인장, 압축, 전단 1. 재료의 기계적 성질 2. 인장시험곡선 3. 탄성계수, Hooke의 법칙, Poisson's ratio
Fifth week	제1장 인장, 압축, 전단 1. 전단하중과 전단변형률 2. 허용응력과 허용하중 3. 예제 및 문제 풀이
Sixth week	제2장 축하중을 받는 부재 1. 축하중을 받는 부재의 길이 변형(정정계) 2. 정정계 구조물의 변형량 계산 예제문제 풀이 3. 예제 및 문제 풀이
Seventh week	제2장 축하중을 받는 부재 1. 축하중을 받는 부재의 길이 변형(부정정계) 2. 부정정계 구조물의 변형량 계산 예제문제
Eighth week	중간고사
Ninth week	중간고사 문제 풀이 및 복습 제2장 축하중을 받는 부재 1. 열효과, 어긋남, 사전변형 2. 경사면에서의 응력 3. 예제문제 풀이
Tenth week	제2장 축하중을 받는 부재 1. 변형에너지 2. 충격하중, 반복하중과 피로(fatigue) 3. 응력집중 4. 예제문제 풀이
Eleventh week	제3장 비틀림(Torsion) 1. 비틀림에서의 응력, 변형률, 변형 2. 원형축에 의한 동력 전달 3. 부정정 비틀림 부재 4. 예제문제 풀이
Twelfth week	제3장 비틀림(Torsion) 1. 비틀림과 순수전단에서의 변형에너지 2. 두께가 얇은 관 3. 예제문제 풀이
Thirteenth week	제7장 응력과 변형률의 해석 1. 평면응력과 평면변형률 2. 주응력과 최대전단응력 3. 예제문제 풀이
Fourteenth week	제7장 응력과 변형률의 해석 1. 평면응력에 대한 모어 원 2. 모어 원의 작도법 3. 변형률의 측정 3. 예제문제 풀이
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

	assignment	TBD	submission date	

The first assignment	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGINEERING THERMODYNAMICS 1	Course Number	0002807001
Major / School Year	Dept. of Mechanical Engineering / 2	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 안호선	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-386:월(4)(5)] [09-226:토(2)]
Office hours			

[1] Outline / Purpose

열역학은 상태의 변화에 따른 물질의 성질을 연구하는 학문으로서 에너지, 일 및 열사이의 모든관계를 유도하며 이를 통해 각종 열기관의 작동사이클해석에 필요한 기본지식의 함양을 교과목의 목적으로 한다.

[2] Course Learning Outcomes

본 과목을 통하여 에너지 및 열과 일에 관련된 모든 개념을 이해하고 이를 물이나 증기, 공기 등의 성질변화에 대한 해석을 가능하게 하며 이를 통해 열기관의 이해를 위한 기본적인 개념이해를 수업목표로 한다.

[3] Class Delivery Method

강의와 자유토론

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
70 %	0 %	30 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	노승탁	Publisher	문운당	Textbook	최신공업열역학 제4판	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	개요
Second week	순수물질의 상태방정식과 열역학적 성질
Third week	순수물질의 상태방정식과 열역학적 성질
Fourth week	열역학 제1법칙의 공식화와 에너지
Fifth week	열역학 제1법칙의 공식화와 에너지
Sixth week	열역학 제1법칙의 공식화와 에너지
Seventh week	개방시스템에서 열역학 기본법칙의 공식화
Eighth week	중간고사
Ninth week	열역학 제2법칙의 공식화와 엔트로피
Tenth week	열역학 제2법칙의 공식화와 엔트로피
Eleventh week	개방시스템에서 열역학 기본법칙의 공식화
Twelfth week	증기동력 사이클
Thirteenth week	증기동력 사이클
Fourteenth week	냉동사이클
Fifteenth week	냉동사이클
Sixteenth week	기말고사

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGINEERING THERMODYNAMICS 1	Course Number	0002807002
Major / School Year	Dept. of Mechanical Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 안호선	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-386:월(8)(9)] [09-226:토(1)]
Office hours			

[1] Outline / Purpose

열역학은 상태의 변화에 따른 물질의 성질을 연구하는 학문으로서 에너지, 일 및 열사이의 모든관계를 유도하며 이를 통해 각종 열기관의 작동사이클해석에 필요한 기본지식의 함양을 교과목의 목적으로 한다.

[2] Course Learning Outcomes

본 과목을 통하여 에너지 및 열과 일에 관련된 모든 개념을 이해하고 이를 물이나 증기, 공기 등의 성질변화에 대한 해석을 가능하게 하며 이를 통해 열기관의 이해를 위한 기본적인 개념이해를 수업목표로 한다.

[3] Class Delivery Method

강의와 자유토론

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
70 %	0 %	30 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	노승탁	Publisher	문운당	Textbook	최신공업열역학 제4판	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	개요
Second week	순수물질의 상태방정식과 열역학적 성질
Third week	순수물질의 상태방정식과 열역학적 성질
Fourth week	열역학 제1법칙의 공식화와 에너지
Fifth week	열역학 제1법칙의 공식화와 에너지
Sixth week	열역학 제1법칙의 공식화와 에너지
Seventh week	개방시스템에서 열역학 기본법칙의 공식화
Eighth week	중간고사
Ninth week	열역학 제2법칙의 공식화와 엔트로피
Tenth week	열역학 제2법칙의 공식화와 엔트로피
Eleventh week	개방시스템에서 열역학 기본법칙의 공식화
Twelfth week	증기동력 사이클
Thirteenth week	증기동력 사이클
Fourteenth week	냉동사이클
Fifteenth week	냉동사이클
Sixteenth week	기말고사

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGINEERING MATERIALS	Course Number	EPA6123001
Major / School Year	Dept. of Mechanical Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 전태성	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-386:수(8)(9)] [08-482:목(3)]
Office hours			

[1] Outline / Purpose

The understanding of the relationships between properties, structure, processing and performance of materials is of significant importance for most industrial applications including mechanical, civil, construction, aeronautical, chemical or biomedical engineering. This course therefore covers the fundamentals of materials particularly used in the field of mechanical engineering.

[2] Course Learning Outcomes

1. To understand the fundamental knowledge of materials
2. To convey a theoretical background to examine the property and structure of materials
3. To provide the characteristic and applications of diverse metallic materials

[3] Class Delivery Method

This lecture course will be in English.

The course materials will be provided using ppt/pdf slides.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	20 %	10 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	80 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm Exam: 30%

Final Exam: 30%

Report: 20%

Attendance: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	W.D. Callister and D.G. Rethwisch	Publisher	Wiley	Textbook	Materials Science and Engineering 9/E	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	G.E. Dieter	Publisher	McGraw-Hill	Textbook	Mechanical Metallurgy	Issued year	1988
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Fundamentals of Crystallography
Third week	The Structure of Crystalline Solids
Fourth week	Imperfections of Solids
Fifth week	Mechanical Properties of Metals (Part I)
Sixth week	Mechanical Properties of Metals (Part II)
Seventh week	Dislocation & Strengthening Mechanisms
Eighth week	Midterm Exam
Ninth week	Failure (Part I)
Tenth week	Failure (Part II)
Eleventh week	Iron and Steel (Part I)
Twelfth week	Iron and Steel (Part II)
Thirteenth week	Nonferrous Metals
Fourteenth week	Advanced Engineering Materials
Fifteenth week	Final Exam
Sixteenth week	Supplementary lecture

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGINEERING MATERIALS	Course Number	EPA6123003
Major / School Year	Dept. of Mechanical Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 이태선	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-101:목(2)(3)] [28-102:화(4)]
Office hours	TBA		

[1] Outline / Purpose

In this course the mechanical characteristics and structure of engineering materials will be covered.

[2] Course Learning Outcomes

Study the structural materials in terms of their microstructure and properties.
The students will learn to read phase diagrams and relate the structure to the properties.

[3] Class Delivery Method

This course will be offered as on-line or off-line lectures.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
80 %	20 %	0 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Callister	Publisher	시그마프레스	Textbook	Materials Science and Engineering	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction and fundamentals of materials
Second week	The structure of crystalline solids
Third week	Imperfections in solids
Fourth week	Mechanical properties of metals
Fifth week	Dislocations
Sixth week	Strengthening Mechanisms
Seventh week	Failure
Eighth week	Mid-term
Ninth week	Phase diagram
Tenth week	Phase transformation and diffusion
Eleventh week	Ferrous metals
Twelfth week	Non-ferrous metals
Thirteenth week	Polymers
Fourteenth week	Metal processing
Fifteenth week	Final-term
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGINEERING MATERIALS	Course Number	EPA6123002
Major / School Year	Dept. of Mechanical Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 전태성	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-101:화(4)] [08-386:목(5)(6)]
Office hours			

[1] Outline / Purpose

The understanding of the relationships between properties, structure, processing and performance of materials is of significant importance for most industrial applications including mechanical, civil, construction, aeronautical, chemical or biomedical engineering. This course therefore covers the fundamentals of materials particularly used in the field of mechanical engineering.

[2] Course Learning Outcomes

1. To understand the fundamental knowledge of materials
2. To convey a theoretical background to examine the property and structure of materials
3. To provide the characteristic and applications of diverse metallic materials

[3] Class Delivery Method

This lecture course will be in English.

The course materials will be provided using ppt/pdf slides.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	20 %	10 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	80 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm Exam: 30%

Final Exam: 30%

Report: 20%

Attendance: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	W.D. Callister and D.G. Rethwisch	Publisher	Wiley	Textbook	Materials Science and Engineering 9/E	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	G.E. Dieter	Publisher	McGraw-Hill	Textbook	Mechanical Metallurgy	Issued year	1988
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Fundamentals of Crystallography
Third week	The Structure of Crystalline Solids
Fourth week	Imperfections of Solids
Fifth week	Mechanical Properties of Metals (Part I)
Sixth week	Mechanical Properties of Metals (Part II)
Seventh week	Dislocation & Strengthening Mechanisms
Eighth week	Midterm Exam
Ninth week	Failure (Part I)
Tenth week	Failure (Part II)
Eleventh week	Iron and Steel (Part I)
Twelfth week	Iron and Steel (Part II)
Thirteenth week	Nonferrous Metals
Fourteenth week	Advanced Engineering Materials
Fifteenth week	Final Exam
Sixteenth week	Supplementary lecture

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ELECTRICAL AND ELECTRONIC ENGINEERING	Course Number	EPA6098001
Major / School Year	Dept. of Mechanical Engineering / 2	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김경태	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-482:월(6)] [08-503:금(2)(3)]
Office hours			

[1] Outline / Purpose

제어 및 계측 장치에 활용하는 전기전자공학 기초 이해

[2] Course Learning Outcomes

전기 회로 분석, 과도 및 정상상태 응답 해석 능력 배양

[3] Class Delivery Method

-온라인 동영상 시청 및 대면 강의

* 전기공학과, 전자공학과, 메카트로닉스공학과, 안전공학과, 정보통신공학과, 임베디드시스템공학과 소속 학생은 수강 불허

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	0 %	0 %	0 %	30 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	70 %	0 %	30 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Richard C. Dorf, James A. Svoboda	Publisher	Wiley	Textbook	Dorf's Introduction to Electric Circuit, Global Edition	Issued year	2018
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Electric Circuit Variables
Second week	Circuit Elements
Third week	Resistive Circuits
Fourth week	Methods of Analysis of Resistive Circuits
Fifth week	Circuit Theorems 1
Sixth week	Circuit Theorems 2
Seventh week	The OP Amp
Eighth week	중간고사
Ninth week	Energy Storage Elements
Tenth week	The complete response of RL/RC circuits
Eleventh week	The complete response of circuits 1
Twelfth week	The complete response of circuits 2
Thirteenth week	The Sinusoidal Steady-State Analysis
Fourteenth week	AC Steady State Power
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ELECTRICAL AND ELECTRONIC ENGINEERING	Course Number	EPA6098003
Major / School Year	Dept. of Mechanical Engineering / 2	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김태우	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-101:금(2)(3)] [09-226:토(5)]
Office hours			

[1] Outline / Purpose

This course covers the analysis of electric circuits used in the generation, transmission, and consumption of electric power and energy.

[2] Course Learning Outcomes

To understand the fundamental principles and methods of circuit analysis for direct and alternating currents.

[3] Class Delivery Method

Online blended course

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	90 %	0 %	0 %	10 %

[4] Grading Policies

Midterm exam: 30%

Final exam: 30%

Assignment(Quiz): 20%

Attendance: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Richard C. Dorf, James A. Svoboda	Publisher	Wiley	Textbook	Dorf's Introduction to Electric Circuit, Global Edition	Issued year	2018
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Electric Circuit Variables
Second week	Circuit Elements
Third week	Resistive Circuits
Fourth week	Methods of Analysis of Resistive Circuits
Fifth week	Circuit Theorems 1
Sixth week	Circuit Theorems 2
Seventh week	The OP Amp
Eighth week	Midterm Exam
Ninth week	Energy Storage Elements
Tenth week	The complete response of RL/RC circuits
Eleventh week	The complete response of circuits 1
Twelfth week	The complete response of circuits 2
Thirteenth week	The Sinusoidal Steady-State Analysis
Fourteenth week	AC Steady State Power
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ELECTRICAL AND ELECTRONIC ENGINEERING	Course Number	EPA6098002
Major / School Year	Dept. of Mechanical Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김태우	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-386:월(6)(7)] [09-226:토(4)]
Office hours			

[1] Outline / Purpose

This course covers the analysis of electric circuits used in the generation, transmission, and consumption of electric power and energy.

[2] Course Learning Outcomes

To understand the fundamental principles and methods of circuit analysis for direct and alternating currents.

[3] Class Delivery Method

Online blended course

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	90 %	0 %	0 %	10 %

[4] Grading Policies

Midterm exam: 30%

Final exam: 30%

Assignment(Quiz): 20%

Attendance: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Richard C. Dorf, James A. Svoboda	Publisher	Wiley	Textbook	Dorf's Introduction to Electric Circuit, Global Edition	Issued year	2018
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Electric Circuit Variables
Second week	Circuit Elements
Third week	Resistive Circuits
Fourth week	Methods of Analysis of Resistive Circuits
Fifth week	Circuit Theorems 1
Sixth week	Circuit Theorems 2
Seventh week	The OP Amp
Eighth week	Midterm Exam
Ninth week	Energy Storage Elements
Tenth week	The complete response of RL/RC circuits
Eleventh week	The complete response of circuits 1
Twelfth week	The complete response of circuits 2
Thirteenth week	The Sinusoidal Steady-State Analysis
Fourteenth week	AC Steady State Power
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MANUFACTURING PROCESSES	Course Number	EA06021001
Major / School Year	Dept. of Mechanical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 구상모	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-268:토(1)] [08-272:화(2)(3)]
Office hours		lecture room	

[1] Outline / Purpose

우리나라 제조업이 세계적 경쟁력을 갖추기 위해서는 제품생산 공정이나 생산기계에 대한 이론적 원리나 현장에서 발생하는 문제 등에 대한 종합적 이해가 필요하다. 이를 위하여 근본적으로 개별 생산공정을 잘 이해하여, 금형설계를 포함한 공정변수들을 결정함으로써 제품개발이 경제적이면서도 신속하게 이루어지도록 해야한다. 따라서, 본 교과목은 수강 학생들로 하여금 기계공학 전공에서 학습한 기본 역학과목, 수학적 지식, 공업재료, 컴퓨터 활용 등에 대한 이해를 기본으로 각 생산공정의 특성, 공정설계 방법, 공정 상호간의 비교와 선택, 경제성의 고려 등에 대하여 학습한다.

** No Enrolment for international and exchange students **

** 타과 (복수전공 제외) 학생은 반드시 담당교수의 허락을 받은 후에 수강신청 가능 / 그렇지 않은 경우 학생에게 통지없이 수강신청 취소 시킬 예정 **

[2] Course Learning Outcomes

여러 종류의 생산과정 (manufacturing processes) 중에서도 특히, 계측, 표면처리, 주조, 소성가공, 접합 (용접), 절삭가공, 가공자동화 등을 대상으로 공정별 기본 원리를 이해하게 하고, 각종 가공 방법에서 공정변수의 선택, 재료의 대체, 경쟁력 확보 등에 대한 개념을 정립하여, 실용적인 측면에서 생산공정의 설계 및 제품개발을 할 수 있는 능력을 기른다. 또한, 공정들의 동영상 시청을 통하여 실제 생산현장의 감각을 익히도록 한다.

** No Enrolment for international and exchange students **

** 타과 (복수전공 제외) 학생은 반드시 담당교수의 허락을 받은 후에 수강신청 가능 / 그렇지 않은 경우 학생에게 통지없이 수강신청 취소 시킬 예정 **

[3] Class Delivery Method

- 공정의 기본원리나 응용례에 대한 이론적 강의
- 공정의 실제 동영상 시청
- 생산현장이나 기계전시회 견학 (추후 공지)
- 중간/기말고사

** No Enrolment for international and exchange students **

** 타과 (복수전공 제외) 학생은 반드시 담당교수의 허락을 받은 후에 수강신청 가능 / 그렇지 않은 경우 학생에게 통지없이 수강신청 취소 시킬 예정 **

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	10 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	75 %	0 %	25 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	김낙수 (울진)	Publisher	성진미디어	Textbook	공업재료가공학	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	S. Kalpakjian 외	Publisher	Pearson	Textbook	Manufacturing Processes for Engineering Materials	Issued year	2008
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	교과목 소개 및 강의 목적 설명
Second week	제1장 일반적 개요 - 제품설계와 동시공학 - 재료 및 가공법의 선택 - 품질인증과 종합품질경영 - 공작기계의 원리와 종류
Third week	제2장 재료의 기계적 성질 - 기계적 성질의 개요 제4장 표면, 트라이볼로지, 치수특성, 검사 및 품질인증 - 표면특성, 표면처리, 코팅 및 청정 - 치수공차/시험/검사/품질관리
Fourth week	제5장 주조공정 - 금속의 응고 및 주조조직 - 용해법과 용해로/주물재료 - 잉곳주조와 연속주조
Fifth week	제5장 주조공정 - 소모성주형 주조공정 - 영구주형 주조공정 - 열처리법 - 주조설계 및 경제성
Sixth week	제6장 부피성형가공 - 단조, 압연, 압출, 인발 - 스웨이징
Seventh week	제6장 부피성형가공 - 금형가공 - 부피성형가공의 경제성
Eighth week	중간고사
Ninth week	제7장 판재성형가공 - 전단, 굽힘, 딥드로잉 - 판재의 성형성
Tenth week	제8장 절삭가공 - 공구마멸과 파손 - 표면정도 - 절삭성 - 공구재료, 절삭유
Eleventh week	제8장 절삭가공 - 고속절삭 - 머시닝센터와 터닝센터 - 공작기계의 구조
Twelfth week	제12장 접합과 이음 - 산소용접, 아크용접, 용접부 특성 - 냉간압접, 초음파용접, 마찰용접, 저항용접 - 폭발용접, 확산용접
Thirteenth week	제12장 접합과 이음 - 폭발용접, 확산용접 - 기계적 이음
Fourteenth week	제14장 가공자동화 - 수치제어 기계 - 산업용 로봇 제15장 컴퓨터통합가공 시스템 제16장 제품설계와 가공의 경쟁력
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment	선반 및 밀링 실습 <- 변경가능 (변경시 추후 공지 예정)	submission date	
	purpose			
	procedure & notice	선반 및 밀링 실습 <- 변경가능 (변경시 추후 공지 예정)		

	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MANUFACTURING PROCESSES	Course Number	EA06021003
Major / School Year	Dept. of Mechanical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 이태선	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-268:토(3)] [28-102:화(2)(3)]
Office hours			

[1] Outline / Purpose

From this course the students will learn the characteristics and design element of each manufacturing process. The students will also be able to compare and select the proper processing technologies for given mechanical challenges.

[2] Course Learning Outcomes

Understanding the fundamentals of processes, materials and parameters for optimized manufacturing.

[3] Class Delivery Method

This course will be offered as on-line or off-line lectures.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
90 %	0 %	0 %	0 %	10 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	90 %	0 %	10 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
80 %	20 %	0 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kalpakjian	Publisher	성진미디어	Textbook	Manufacturing Processes for Engineering Materials	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Kalpakjian	Publisher		Textbook	Manufacturing Engineering and Technology	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Fundamentals of Manufacturing
Third week	Materials
Fourth week	Things to consider for manufacturing
Fifth week	Surface, Tribology, Inspection
Sixth week	Casting
Seventh week	Bulk Forming
Eighth week	Midterm Exam
Ninth week	Sheet Forming
Tenth week	Cutting (Machining)
Eleventh week	Abrasive Machining and Finishing
Twelfth week	Processing of Polymers and Composites
Thirteenth week	Joining
Fourteenth week	Automation
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MANUFACTURING PROCESSES	Course Number	EA06021002
Major / School Year	Dept. of Mechanical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 구상모	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-268:토(2)] [08-272:수(2)(3)]
Office hours		lecture room	

[1] Outline / Purpose

우리나라 제조업이 세계적 경쟁력을 갖추기 위해서는 제품생산 공정이나 생산기계에 대한 이론적 원리나 현장에서 발생하는 문제 등에 대한 종합적 이해가 필요하다. 이를 위하여 근본적으로 개별 생산공정을 잘 이해하여, 금형설계를 포함한 공정변수들을 결정함으로써 제품개발이 경제적이면서도 신속하게 이루어지도록 해야한다. 따라서, 본 교과목은 수강 학생들로 하여금 기계공학 전공에서 학습한 기본 역학과목, 수학적 지식, 공업재료, 컴퓨터 활용 등에 대한 이해를 기본으로 각 생산공정의 특성, 공정설계 방법, 공정 상호간의 비교와 선택, 경제성의 고려 등에 대하여 학습한다.

** No Enrolment for international and exchange students **

** 타과 (복수전공 제외) 학생은 반드시 담당교수의 허락을 받은 후에 수강신청 가능 / 그렇지 않은 경우 학생에게 통지없이 수강신청 취소 시킬 예정 **

[2] Course Learning Outcomes

여러 종류의 생산과정 (manufacturing processes) 중에서도 특히, 계측, 표면처리, 주조, 소성가공, 접합 (용접), 절삭가공, 가공자동화 등을 대상으로 공정별 기본 원리를 이해하게 하고, 각종 가공 방법에서 공정변수의 선택, 재료의 대체, 경쟁력 확보 등에 대한 개념을 정립하여, 실용적인 측면에서 생산공정의 설계 및 제품개발을 할 수 있는 능력을 기른다. 또한, 공정들의 동영상 시청을 통하여 실제 생산현장의 감각을 익히도록 한다.

** No Enrolment for international and exchange students **

** 타과 (복수전공 제외) 학생은 반드시 담당교수의 허락을 받은 후에 수강신청 가능 / 그렇지 않은 경우 학생에게 통지없이 수강신청 취소 시킬 예정 **

[3] Class Delivery Method

- 공정의 기본원리나 응용례에 대한 이론적 강의
- 공정의 실제 동영상 시청
- 생산현장이나 기계전시회 견학 (추후 공지)
- 중간/기말고사

** No Enrolment for international and exchange students **

** 타과 (복수전공 제외) 학생은 반드시 담당교수의 허락을 받은 후에 수강신청 가능 / 그렇지 않은 경우 학생에게 통지없이 수강신청 취소 시킬 예정 **

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	10 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	75 %	0 %	25 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	김낙수 (울진)	Publisher	성진미디어	Textbook	공업재료가공학	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	S. Kalpakjian 외	Publisher	Pearson	Textbook	Manufacturing Processes for Engineering Materials	Issued year	2008
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	교과목 소개 및 강의 목적 설명
Second week	제1장 일반적 개요 - 제품설계와 동시공학 - 재료 및 가공법의 선택 - 품질인증과 종합품질경영 - 공작기계의 원리와 종류
Third week	제2장 재료의 기계적 성질 - 기계적 성질의 개요 제4장 표면, 트라이볼로지, 치수특성, 검사 및 품질인증 - 표면특성, 표면처리, 코팅 및 청정 - 치수공차/시험/검사/품질관리
Fourth week	제5장 주조공정 - 금속의 응고 및 주조조직 - 용해법과 용해로/주물재료 - 잉곳주조와 연속주조
Fifth week	제5장 주조공정 - 소모성주형 주조공정 - 영구주형 주조공정 - 열처리법 - 주조설계 및 경제성
Sixth week	제6장 부피성형가공 - 단조, 압연, 압출, 인발 - 스웨이징
Seventh week	제6장 부피성형가공 - 금형가공 - 부피성형가공의 경제성
Eighth week	중간고사
Ninth week	제7장 판재성형가공 - 전단, 굽힘, 딥드로잉 - 판재의 성형성
Tenth week	제8장 절삭가공 - 공구마멸과 파손 - 표면정도 - 절삭성 - 공구재료, 절삭유
Eleventh week	제8장 절삭가공 - 고속절삭 - 머시닝센터와 터닝센터 - 공작기계의 구조
Twelfth week	제12장 접합과 이음 - 산소용접, 아크용접, 용접부 특성 - 냉간압접, 초음파용접, 마찰용접, 저항용접 - 폭발용접, 확산용접
Thirteenth week	제12장 접합과 이음 - 폭발용접, 확산용접 - 기계적 이음
Fourteenth week	제14장 가공자동화 - 수치제어 기계 - 산업용 로봇 제15장 컴퓨터통합가공 시스템 제16장 제품설계와 가공의 경쟁력
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment	선반 및 밀링 실습 <- 변경가능 (변경시 추후 공지 예정)	submission date	
	purpose			
	procedure & notice	선반 및 밀링 실습 <- 변경가능 (변경시 추후 공지 예정)		

	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	FLUID MECHANICS(2)	Course Number	EPA6058002
Major / School Year	Dept. of Mechanical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 권재성	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-101:월(5B-6)] [08-386:화(4-5A)]
Office hours		lecture room	

[1] Outline / Purpose

유체역학(2)에서는 유체역학(1)에서 배운 유체정역학, 유체동역학, 유체운동학, 그리고 유한 검사체적 해석 방법을 바탕으로 하여 유동 상사율, 파이프내 점성 유동, 외부 유동, 그리고 터보머시너리를 배웁니다. 유동 상사율에서는 상사(similitude)라는 개념을 통해 한 시스템에 대해 얻어진 측정값을 사용하여 다른 상사 시스템의 거동을 설명할 수 있는 방법을 배웁니다. 파이프내 점성 유동에서는 앞서 배운 질량, 운동량, 에너지 등에 관련된 지배 법칙들을 이용하여 파이프와 덕트 내부의 유동을 해석합니다. 외부유동에서는 경계층이론과 항력 및 양력을 기반으로 다양한 외부유동형태를 해석합니다. 마지막으로 터보머시너리에서는 에너지 방정식과 각 운동량 방정식을 이용하여 펌프, 팬, 터빈 등의 터보머신들의 작동원리를 배웁니다.

[2] Course Learning Outcomes

본 강의를 통해 수강생들은 버킹엄 이론의 적용하여 주어진 유동 상황에 대한 무차원수를 유도하고 그 무차원수를 이용하여 그 유동을 특징화하는 방법을 습득합니다. 또한 유체방정식을 이용하여 내부유동의 속도프로파일을 결정하고 그로부터 유동특징들을 파악할 수 있어야 합니다. 아울러 경계층이론의 개념과 수학적 모델링을 익히는 한편, 터보머신의 작동원리를 이해합니다.

[3] Class Delivery Method

1. 본 강의는 온라인(동영상)+오프라인 수업을 병행하는 방식으로 진행됩니다.
2. 온라인(동영상)강의를 위해 매주 강의 3시간에 해당하는 동영상 및 슬라이드 자료들을 인천대 이러닝 웹사이트 LMS시스템(cyber.inu.ac.kr)에 미리 업로드해 놓을 것입니다. 따라서 수강생들은 오프라인 수업에 오기 전 그 온라인 자료들을 완벽히 시청하여야 합니다. 오프라인 수업은 온라인 자료에 대한 수강생들의 질의와 답변, 그리고 관련예제들의 풀이를 하는 시간으로 구성됩니다.
3. 온라인 동영상은 시간표에 정해진 수업시간에 맞춰 접속하여 시청해야만 LMS상에 출석으로 기록되며, 수업시간 이외에 접속하여 시청할 경우 아무리 100%시청했다 하더라도 출석으로 간주되지 않으니 이점 반드시 유념해주길 바랍니다.
4. 본 강의는 원어강의입니다. 그러나 유체역학(2)에 대한 수강생들의 이해를 드높이기 위해 온라인 동영상에서 구두로 전달하는 내용에 대해서는 한국어를 사용하기로 하되, 그 이외 수업자료, 과제, 시험문제 등에 대해서는 영어를 사용할 것입니다.
5. 수업과 관련된 공지사항들은 모두 이러닝 웹사이트에 게시합니다: cyber.inu.ac.kr. 개강전까지 웹사이트에 들어가서 본인의 개인 연락처를 반드시 확인하여 필요시 수정하도록 하고, 별도의 공지가 없다고 하더라도 주기적으로 웹사이트를 체크하여 본인의 수업과 학습에 지장이 없도록 해주길 바랍니다.
6. 시험은 2회(중간고사, 기말고사) 치뤄지며, 대면방식으로 치뤄집니다.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	0 %	0 %	0 %	30 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	20 %	0 %	30 %	0 %	0 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Munson	Publisher	Wiley	Textbook	Fluid Mechanics	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Frank White	Publisher	McGraw-Hill	Textbook	Fluid Mechanics	Issued year	
(2)	Author	Fox and McDonald	Publisher	Wiley	Textbook	Introduction to Fluid Mechanics	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Chapter 7. Dimensional Analysis, Similitude, and Modeling (1) – Dimensional Analysis – Buckingham PI theorem – Determination of PI Terms – Determination of PI terms by inspection – Common Dimensionless Groups in Fluid Mechanics – Correlation of Experimental Data
Second week	Chapter 7. Dimensional Analysis, Similitude, and Modeling (2) – Modeling and Similitude – Some Typical Model Studies – Similitude Based on Governing Differential Equations
Third week	Chapter 8. Viscous Flow in Pipes (1) – General Characteristics of Pipe Flow – Fully Developed Laminar Flow
Fourth week	Chapter 8. Viscous Flow in Pipes (2) – Fully Developed Turbulent Flow – Dimensional Analysis of Pipe Flow
Fifth week	Chapter 8. Viscous Flow in Pipes (3) – Pipe flow examples – Pipe Flowrate Measurement
Sixth week	Chapter 9. Flow Over Immersed Bodies (1) – General External Flow Characteristics – Boundary Layer Characteristics
Seventh week	Chapter 9. Flow Over Immersed Bodies (2) – Boundary Layer Characteristics
Eighth week	Mid-term exam
Ninth week	Chapter 9. Flow Over Immersed Bodies (3) – Drag
Tenth week	Chapter 9. Flow Over Immersed Bodies (4) – Lift
Eleventh week	Chapter 12. Turbomachines (1) – Introduction – Basic Energy Consideration – Basic Angular Momentum Consideration
Twelfth week	Chapter 12. Turbomachines (2) – The Centrifugal Pump – Dimensionless Parameters and Similarity Laws
Thirteenth week	Chapter 12. Turbomachines (3) – Dimensionless Parameters and Similarity Laws – Axial-Flow and Mixed-Flow Pumps
Fourteenth week	Chapter 12. Turbomachines (4) – Fans – Turbines
Fifteenth week	Final-term exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The third assignment	purpose	
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	FLUID MECHANICS(2)	Course Number	EPA6058003
Major / School Year	Dept. of Mechanical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 권재성	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-101:월(7-8A)] [08-386:화(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

유체역학(2)에서는 유체역학(1)에서 배운 유체정역학, 유체동역학, 유체운동학, 그리고 유한 검사체적 해석 방법을 바탕으로 하여 유동 상사율, 파이프내 점성 유동, 외부 유동, 그리고 터보머신너리를 배웁니다. 유동 상사율에서는 상사(similitude)라는 개념을 통해 한 시스템에 대해 얻어진 측정값을 사용하여 다른 상사 시스템의 거동을 설명할 수 있는 방법을 배웁니다. 파이프내 점성 유동에서는 앞서 배운 질량, 운동량, 에너지 등에 관련된 지배 법칙들을 이용하여 파이프와 덕트 내부의 유동을 해석합니다. 외부유동에서는 경계층이론과 항력 및 양력을 기반으로 다양한 외부유동형태를 해석합니다. 마지막으로 터보머신너리에서는 에너지 방정식과 각 운동량 방정식을 이용하여 펌프, 팬, 터빈 등의 터보머신들의 작동원리를 배웁니다.

[2] Course Learning Outcomes

본 강의를 통해 수강생들은 버킹엄 이론의 적용하여 주어진 유동 상황에 대한 무차원수를 유도하고 그 무차원수를 이용하여 그 유동을 특징화하는 방법을 습득합니다. 또한 유체방정식을 이용하여 내부유동의 속도프로파일을 결정하고 그로부터 유동특징들을 파악할 수 있어야 합니다. 아울러 경계층이론의 개념과 수학적 모델링을 익히는 한편, 터보머신의 작동원리를 이해합니다.

[3] Class Delivery Method

1. 본 강의는 오프라인 대면방식으로 진행됩니다.
2. 오프라인 강의에 대한 사전예습을 위해 매주 강의 3시간에 해당하는 동영상 및 슬라이드 자료들을 인천대 이러닝 웹사이트 LMS 시스템(cyber.inu.ac.kr)에 미리 업로드해 놓을 것입니다. 따라서 수강생들은 오프라인 수업에 오기 전 그 온라인 자료들을 완벽히 시청하여야 합니다. 오프라인 수업은 사전예습 강의를 보강하는 한편, 수강생들의 질의와 답변, 그리고 관련예제들의 풀이를 하는 시간으로 구성됩니다.
3. 본 강의는 원어강의입니다. 그러나 유체역학(2)에 대한 수강생들의 이해를 돕기 위해 사전예습 동영상에서 구두로 전달하는 내용에 대해서는 한국어를 사용하기로 하되, 그 외 수업자료, 과제, 시험문제, 오프라인 수업 등에서는 영어를 사용할 것입니다.
4. 수업과 관련된 공지사항들은 모두 LMS웹사이트상에 게시할 것입니다. 개강전까지 LMS시스템에 접속하여 본인의 개인연락처를 반드시 확인하고, 잘못된 정보가 기록되어 있을 경우 반드시 수정해주길 바랍니다. 별도의 공지가 없다고 하더라도 주기적으로 LMS 사이트를 체크하여 본인의 수업과 학습에 지장이 없도록 해주길 바랍니다.
5. 시험은 2회(중간고사, 기말고사) 치뤄지며, 대면방식으로 치뤄집니다.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	30 %	0 %	70 %	0 %	0 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Munson	Publisher	Wiley	Textbook	Fluid Mechanics	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Frank White	Publisher	McGraw-Hill	Textbook	Fluid Mechanics	Issued year	
(2)	Author	Fox and McDonald	Publisher	Wiley	Textbook	Introduction to Fluid Mechanics	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Chapter 7. Dimensional Analysis, Similitude, and Modeling (1) – Dimensional Analysis – Buckingham PI theorem – Determination of PI Terms – Determination of PI terms by inspection – Common Dimensionless Groups in Fluid Mechanics – Correlation of Experimental Data
Second week	Chapter 7. Dimensional Analysis, Similitude, and Modeling (2) – Modeling and Similitude – Some Typical Model Studies – Similitude Based on Governing Differential Equations
Third week	Chapter 8. Viscous Flow in Pipes (1) – General Characteristics of Pipe Flow – Fully Developed Laminar Flow
Fourth week	Chapter 8. Viscous Flow in Pipes (2) – Fully Developed Turbulent Flow – Dimensional Analysis of Pipe Flow
Fifth week	Chapter 8. Viscous Flow in Pipes (3) – Pipe flow examples – Pipe Flowrate Measurement
Sixth week	Chapter 9. Flow Over Immersed Bodies (1) – General External Flow Characteristics – Boundary Layer Characteristics
Seventh week	Chapter 9. Flow Over Immersed Bodies (2) – Boundary Layer Characteristics
Eighth week	Mid-term exam
Ninth week	Chapter 9. Flow Over Immersed Bodies (3) – Drag
Tenth week	Chapter 9. Flow Over Immersed Bodies (4) – Lift
Eleventh week	Chapter 12. Turbomachines (1) – Introduction – Basic Energy Consideration – Basic Angular Momentum Consideration
Twelfth week	Chapter 12. Turbomachines (2) – The Centrifugal Pump – Dimensionless Parameters and Similarity Laws
Thirteenth week	Chapter 12. Turbomachines (3) – Dimensionless Parameters and Similarity Laws – Axial-Flow and Mixed-Flow Pumps
Fourteenth week	Chapter 12. Turbomachines (4) – Fans – Turbines
Fifteenth week	Final-term exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The third assignment	purpose	
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction: MicroElectoMechanical Systems	Course Number	0004892001
Major / School Year	Dept. of Mechanical Engineering / 4	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김경태	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-272:목(7)] [08-515:수(5)(6)]
Office hours			

[1] Outline / Purpose

MEMS 에서 이용되는 공정을 공부하고, 이러한 공정을 이용한 초소형 센서와 액추에이터의 설계 및 제작에 관해 고전적인 방법들과 최신의 동향을 알아보고 이를 기반으로 하여 MEMS 소자나 시스템을 설계하는 경험을 갖도록 한다.

[2] Course Learning Outcomes

미세전자기계시스템(MEMS) 는 반도체 제작 공정을 활용하여 마이크로 또는 나노 스케일의 전자-기계 시스템의 제작에 필요한 지식과 기술을 포괄적으로 포함하는 학문을 의미한다. 최근 기계공학 전공자들은 전자 및 자동차, 또는 정밀 전자 부품 산업체에서 효율적인 업무를 수행하기 위해 반도체 제작 공정 지식이 필요하다. 또한 대학원이나 연구소에 진학하여서도 마이크로 및 나노 스케일에 관한 연구를 진행함에 있어서도 반도체 제작 기술에 대한 지식이 요구된다. 이러한 시대적 흐름과 요구를 충족시키기 위해 '미세전자기계시스템' 과목을 개설하여 학부를 졸업한 기계공학도들이 산업체와 연구소에서 활용할 수 있는 충분한 수준의 반도체 공정 지식을 습득하게 할 것이다.

[3] Class Delivery Method

본 강의는 동영상 강의를 활용하여 플립러닝 방식으로 진행할 수 있음.

-온라인 동영상 시청 + 오프라인 대면 강의

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
25 %	50 %	25 %	%	%	%	%	%

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	25 %	%	%	75 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Chang Liu	Publisher	Pearson, 한티미디어	Textbook	MEMS의 기초 (Foundation of MEMS)	Issued year	2009 0901
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	R. C. Jaeger	Publisher		Textbook	Introduction of Microelectronic Fabrication	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction History of MEMS
Second week	History of MEMS
Third week	Introduction to Micro fabrication
Fourth week	Review of Essential Electrical and Mechanical Concepts
Fifth week	Review of Essential Electrical and Mechanical Concepts
Sixth week	Electrostatic Sensing and Actuation
Seventh week	Electrostatic Sensing and Actuation
Eighth week	Midterm exam.
Ninth week	Thermal Sensing and Actuation
Tenth week	Piezoresistive Sensors
Eleventh week	Bulk Micromachining and Silicon Anisotropic Etching
Twelfth week	Bulk Micromachining and Silicon Anisotropic Etching
Thirteenth week	Surface Micromachining
Fourteenth week	Surface Micromachining
Fifteenth week	Scanning Probe Microscopy SPM Technologies
Sixteenth week	Final exam.

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction: MicroElectoMechanical Systems	Course Number	0004892002
Major / School Year	Dept. of Mechanical Engineering / 4	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김경태	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-101:목(5)(6)] [08-503:수(3)]
Office hours			

[1] Outline / Purpose

MEMS 에서 이용되는 공정을 공부하고, 이러한 공정을 이용한 초소형 센서와 액추에이터의 설계 및 제작에 관해 고전적인 방법들과 최신의 동향을 알아보고 이를 기반으로 하여 MEMS 소자나 시스템을 설계하는 경험을 갖도록 한다.

[2] Course Learning Outcomes

미세전자기계시스템(MEMS) 는 반도체 제작 공정을 활용하여 마이크로 또는 나노 스케일의 전자-기계 시스템의 제작에 필요한 지식과 기술을 포괄적으로 포함하는 학문을 의미한다. 최근 기계공학 전공자들은 전자 및 자동차, 또는 정밀 전자 부품 산업체에서 효율적인 업무를 수행하기 위해 반도체 제작 공정 지식이 필요하다. 또한 대학원이나 연구소에 진학하여서도 마이크로 및 나노 스케일에 관한 연구를 진행함에 있어서도 반도체 제작 기술에 대한 지식이 요구된다. 이러한 시대적 흐름과 요구를 충족시키기 위해 '미세전자기계시스템' 과목을 개설하여 학부를 졸업한 기계공학도들이 산업체와 연구소에서 활용할 수 있는 충분한 수준의 반도체 공정 지식을 습득하게 할 것이다.

[3] Class Delivery Method

본 강의는 동영상 강의를 활용하여 플립러닝 방식으로 진행할 수 있음.

-온라인 동영상 시청 + 오프라인 대면강의

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
25 %	50 %	25 %	%	%	%	%	%

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	25 %	%	%	75 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Chang Liu	Publisher	Pearson, 한티미디어	Textbook	MEMS의 기초 (Foundation of MEMS)	Issued year	2009 0901
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	R. C. Jaeger	Publisher		Textbook	Introduction of Microelectronic Fabrication	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction History of MEMS
Second week	History of MEMS
Third week	Introduction to Micro fabrication
Fourth week	Review of Essential Electrical and Mechanical Concepts
Fifth week	Review of Essential Electrical and Mechanical Concepts
Sixth week	Electrostatic Sensing and Actuation
Seventh week	Electrostatic Sensing and Actuation
Eighth week	Midterm exam.
Ninth week	Thermal Sensing and Actuation
Tenth week	Piezoresistive Sensors
Eleventh week	Bulk Micromachining and Silicon Anisotropic Etching
Twelfth week	Bulk Micromachining and Silicon Anisotropic Etching
Thirteenth week	Surface Micromachining
Fourteenth week	Surface Micromachining
Fifteenth week	Scanning Probe Microscopy SPM Technologies
Sixteenth week	Final exam.

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Robotics	Course Number	0001865001
Major / School Year	Dept. of Mechanical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김영진	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-268:토(4)] [08-386:수(5)(6)]
Office hours			

[1] Outline / Purpose

- Basics of Vision and deep learning
- Study forward and, inverse kinematics, as well as jacobian
- Study robot control code with Arduino

[2] Course Learning Outcomes

- Basics of Vision and deep learning
- Study forward and, inverse kinematics, as well as jacobian

[3] Class Delivery Method

- Slides
- Group study

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	Wiley	Textbook	Robot modeling and control	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Basics of vision
Second week	Labeling
Third week	Blob analysis
Fourth week	Segmentation
Fifth week	CNN
Sixth week	RCNN
Seventh week	Midterm presentation
Eighth week	Midterm presentation
Ninth week	Introduction of robotics
Tenth week	Forward Kinematics
Eleventh week	Forward Kinematics
Twelfth week	Inverse Kinematics
Thirteenth week	Jacobian
Fourteenth week	final presentation
Fifteenth week	final presentation
Sixteenth week	final presentation

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Robotics	Course Number	0001865002
Major / School Year	Dept. of Mechanical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김영진	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-268:토(5)] [08-515:월(5)(6)]
Office hours			

[1] Outline / Purpose

- Basics of Vision and deep learning
- Study forward and, inverse kinematics, as well as jacobian
- Study robot control code with Arduino

[2] Course Learning Outcomes

- Basics of Vision and deep learning
- Study forward and, inverse kinematics, as well as jacobian

[3] Class Delivery Method

- Slides
- Group study

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	Wiley	Textbook	Robot modeling and control	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Basics of vision
Second week	Labeling
Third week	Blob analysis
Fourth week	Segmentation
Fifth week	CNN
Sixth week	RCNN
Seventh week	Midterm presentation
Eighth week	Midterm presentation
Ninth week	Introduction of robotics
Tenth week	Forward Kinematics
Eleventh week	Forward Kinematics
Twelfth week	Inverse Kinematics
Thirteenth week	Jacobian
Fourteenth week	final presentation
Fifteenth week	final presentation
Sixteenth week	final presentation

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Control Engineering 2	Course Number	0011896001
Major / School Year	Dept. of Mechanical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김형근	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-482:화(2)(3),수(4)]
Office hours			

[1] Outline / Purpose

This course delves into the advanced concepts of control system design and analysis, focusing on state-space methods, optimization techniques, and their application in control system design. We will explore state-space representation, control system analysis and design in state-space, static optimization, and optimal control of continuous-time systems. The primary objective is to equip students with the ability to design practical and optimized control systems applicable to real-world scenarios.

[2] Course Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Comprehend state-space representation and utilize it for control system analysis and design.
- 2) Design state feedback controllers and observers for desired system performance.
- 3) Understand and apply static optimization techniques in the context of control systems.
- 4) Grasp the fundamental concepts of optimal control theory and design optimal controllers for continuous-time systems.
- 5) Analyze and design control systems with considerations for constraints and time-varying dynamics.
- 6) Utilize control system simulation tools like MATLAB/Simulink to design and verify control systems.

[3] Class Delivery Method

- The course will be conducted through a combination of lectures, problem-solving sessions, and hands-on projects.
- Announcements and Q&A will be handled via an anonymous Kakao Talk group chat.
- For course registration changes or other questions, please contact: hgkim@inu.ac.kr

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Katsuhiko Ogata	Publisher	Pearson	Textbook	Modern Control Engineering, 5th edition	Issued year	
(2)	Author	Frank L. Lewis, Draguna L. Vrabie, and Vassilis L. Syrmos	Publisher	Wiley	Textbook	Optimal Control 3rd edition	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Richard C. Dorf and Robert H. Bishop	Publisher	Pearson	Textbook	Modern Control Systems, 13th edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Orientation and Introduction to Control Systems
Second week	Review of Linear Algebra (1/2)
Third week	Review of Linear Algebra (2/2)
Fourth week	Mathematical Modeling of Control Systems (1/2): Review of classical control theory
Fifth week	Mathematical Modeling of Control Systems (2/2): Modeling in state space
Sixth week	Control Systems Analysis in State Space (1/2)
Seventh week	Control Systems Analysis in State Space (2/2)
Eighth week	Midterm Exam
Ninth week	Control Systems Design in State Space (1/2)
Tenth week	Control Systems Design in State Space (2/2)
Eleventh week	Static Optimization (1/2)
Twelfth week	Static Optimization (2/2)
Thirteenth week	Optimal Control of Continuous-Time Systems (1/2)
Fourteenth week	Optimal Control of Continuous-Time Systems (2/2)
Fifteenth week	Final-Time-Free and Constrained Input Control
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Control Engineering 2	Course Number	0011896002
Major / School Year	Dept. of Mechanical Engineering / 4	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김형근	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-272:목(5)(6)] [08-482:수(3)]
Office hours			

[1] Outline / Purpose

This course delves into the advanced concepts of control system design and analysis, focusing on state-space methods, optimization techniques, and their application in control system design. We will explore state-space representation, control system analysis and design in state-space, static optimization, and optimal control of continuous-time systems. The primary objective is to equip students with the ability to design practical and optimized control systems applicable to real-world scenarios.

[2] Course Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Comprehend state-space representation and utilize it for control system analysis and design.
- 2) Design state feedback controllers and observers for desired system performance.
- 3) Understand and apply static optimization techniques in the context of control systems.
- 4) Grasp the fundamental concepts of optimal control theory and design optimal controllers for continuous-time systems.
- 5) Analyze and design control systems with considerations for constraints and time-varying dynamics.
- 6) Utilize control system simulation tools like MATLAB/Simulink to design and verify control systems.

[3] Class Delivery Method

- The course will be conducted through a combination of lectures, problem-solving sessions, and hands-on projects.
- Announcements and Q&A will be handled via an anonymous Kakao Talk group chat.
- For course registration changes or other questions, please contact: hgkim@inu.ac.kr

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Katsuhiko Ogata	Publisher	Pearson	Textbook	Modern Control Engineering, 5th edition	Issued year	
(2)	Author	Frank L. Lewis, Draguna L. Vrabie, and Vassilis L. Syrmos	Publisher	Wiley	Textbook	Optimal Control 3rd edition	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Richard C. Dorf and Robert H. Bishop	Publisher	Pearson	Textbook	Modern Control Systems, 13th edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Orientation and Introduction to Control Systems
Second week	Review of Linear Algebra (1/2)
Third week	Review of Linear Algebra (2/2)
Fourth week	Mathematical Modeling of Control Systems (1/2): Review of classical control theory
Fifth week	Mathematical Modeling of Control Systems (2/2): Modeling in state space
Sixth week	Control Systems Analysis in State Space (1/2)
Seventh week	Control Systems Analysis in State Space (2/2)
Eighth week	Midterm Exam
Ninth week	Control Systems Design in State Space (1/2)
Tenth week	Control Systems Design in State Space (2/2)
Eleventh week	Static Optimization (1/2)
Twelfth week	Static Optimization (2/2)
Thirteenth week	Optimal Control of Continuous-Time Systems (1/2)
Fourteenth week	Optimal Control of Continuous-Time Systems (2/2)
Fifteenth week	Final-Time-Free and Constrained Input Control
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Capstone Design 2	Course Number	0006653001
Major / School Year	Dept. of Mechanical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김경태	Grades/Lecture/ Practice	3 / 2 / 2
Phone Number		A weekday / class / lecture room	[08-203:수(1)(2)] [08-272:목(8)(9)]
Office hours			

[1] Outline / Purpose

캡스톤디자인은 그 동안의 배운 공학 지식을 응용하여 제품이나 기계 혹은 시스템 제작 및 생산을 염두에 두고 설계하는 과정을 경험하는 강의로 합니다.
 더불어 본 강의는 LINC3.0 기업연계형 캡스톤디자인 (맞춤형 캡스톤디자인) 교과목입니다.
 실제적 기업의 문제에 접근하기 위하여 인천대 주변 기업인 지오테크놀로지 기업 이 진행중인 디스펜서 개발의 애로점을 공유 받아 전공지식을 활용하여 개선방안을 도출하는 프로젝트를 수행하려고 합니다.

[2] Course Learning Outcomes

기업 프로젝트의 애로 사항의 해결의 통해 실제적인 공학 문제의 해결 방안을 도출하는 능력을 배양하고, 이 과정을 통해서 재료, 공정 등을 고려한 종합 설계 및 제작 과정을 경험하는 것이 수업의 목표 입니다.

[3] Class Delivery Method

* 본 강의는 실제 산업체와 연계하여 산업체 애로 기술을 강의 주제로 합니다.

■ 강의, 토론, 발표 ■ BL(Blended Learning)

■ Team Teaching □ TBL(Team Based Learning)

■ CBL(Case Based Learning) □ AL(Action Learning)

■ PBL(Problem Based Learning) □ 기타

*코로나19로 인해 정상적인 오프라인 수업 전까지는 온라인 강의를 실시함

*인천대학교 학습관리시스템(LMS)에서 동영상을 시청하고 과제를 수행 후 제출함

*출석은 정해진 시간 내에 동영상을 시청하고, 과제를 풀어 이메일로 제출해야 인정함

*질의응답은 이메일을 우선으로 함

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
 · 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher	피어스 에듀케이션 코리아,	Textbook	창의적 공학설계	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	강의소개 및 조편성
Second week	캡스톤설계를 위한 이론 강의
Third week	캡스톤설계의 활용에 대한 강의
Fourth week	캡스톤설계 진행계획 발표
Fifth week	캡스톤설계 개발과정 점검
Sixth week	캡스톤설계 개발과정 점검
Seventh week	캡스톤설계 개발과정 점검
Eighth week	캡스톤설계 중간 발표회
Ninth week	캡스톤설계 개발과정 점검
Tenth week	캡스톤설계 개발과정 점검
Eleventh week	캡스톤설계 개발과정 점검
Twelfth week	캡스톤설계 개발과정 점검
Thirteenth week	캡스톤설계 개발과정 점검
Fourteenth week	캡스톤설계 개발과정 점검
Fifteenth week	캡스톤설계 개발과정 점검
Sixteenth week	캡스톤설계 최종 발표회

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Capstone Design 2	Course Number	0006653002
Major / School Year	Dept. of Mechanical Engineering / 4	completion division /Grade evaluation	/
Department/Professor	Dept. of Mechanical Engineering / 김영진	Grades/Lecture/ Practice	3 / 2 / 2
Phone Number		A weekday / class / lecture room	[08-482:수(1)(2),목(8)(9)]
Office hours			

[1] Outline / Purpose

Design and Development of any kind of devices.

[2] Course Learning Outcomes

Group study

[3] Class Delivery Method

Idea brainstorming and realization

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Meeting
Second week	Meeting
Third week	Meeting
Fourth week	Meeting
Fifth week	Meeting
Sixth week	Meeting
Seventh week	Meeting
Eighth week	Presentation evaluation
Ninth week	Meeting
Tenth week	Meeting
Eleventh week	Meeting
Twelfth week	Meeting
Thirteenth week	Meeting
Fourteenth week	Meeting
Fifteenth week	Meeting
Sixteenth week	Presentation evaluation

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	INTRODUCTION TO SEMICONDUCTOR DEVICES AND ENGINEERING	Course Number	0006696001
Major / School Year	Dept. of Electrical Engineering / 2	completion division /Grade evaluation	/
Department/Professor	Dept. of Electrical Engineering /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-515:목(7-8A)(8B-9)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Physics of Electrical Engineering	Course Number	0004216001
Major / School Year	Dept. of Electrical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Electrical Engineering / 김준동	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-438:월(7-8A),금(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

In almost every case, the work of engineers finds application through materials. For example, developments in the understanding of the structure of materials and the engineering of their properties directly led to solid state devices, Moore's Law scaling of transistors, and the resulting revolutionary growth in all aspects of electrical engineering.

영어 (한국어 보조) 기반 강의입니다. 수강 신청에 유의 바랍니다.

[2] Course Learning Outcomes

영어 (한국어 보조) 기반 강의입니다. 수강 신청에 유의 바랍니다.

The future of Electrical Engineering itself is squarely dependent upon the ability to understand, exploit and apply ever-new electronic, photonic and magnetic properties of materials and with the advent of "nanotechnology" the richness of new properties and the impact of materials on electrical engineers has, arguably, never been more significant.

With a greater understanding of materials, electrical engineers are already leaders in the most pressing societal issues, from renewable energy and environmental sustainability to ultra-portable communication and biocompatible medical devices. The primary purpose of this course is to provide an introduction to the interrelation of the structure, properties and processing of materials, with an emphasis on the first two. While the course covers a broad range of materials and properties, special treatment is given to those of particular interest for electrical engineers.

[3] Class Delivery Method

Lectures and discussions

Two lecturers (Prof. Joondong Kim and Prof. Malkeshkumar Patel) are accompanied in these classes

영어 (한국어 보조) 기반 강의입니다. 수강 신청에 유의 바랍니다.

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	%	20 %	%	10 %	%	%	%

④ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	50 %	%	%	%	%	%	20 %

[4] Grading Policies

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Pierret	Publisher		Textbook	Semiconductor Device Fundamentals	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook	To be assigned	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction; materials in electrical engineering
Second week	Atomic structure, bonding, single/poly-crystals, amorphous
Third week	Crystal structure: atomic density and packing
Fourth week	Crystallographic, directions, density, planes
Fifth week	Crystal planes, examples of semiconductor crystals; defects
Sixth week	Metal-semiconductor properties
Seventh week	Phase diagrams; binary systems; lever rule
Eighth week	Introduction to quantum mechanics; wave-particle duality;
Ninth week	Effective mass, intrinsic and extrinsic semiconductors
Tenth week	Midterm exam
Eleventh week	Electrons and holes, density of states, Fermi level, occupancy Probabilities
Twelfth week	Semiconductors
Thirteenth week	Metal and Schottky devices
Fourteenth week	Photoelectric devices
Fifteenth week	Nanotechnology and Energy devices
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Physics of Electrical Engineering	Course Number	0004216002
Major / School Year	Dept. of Electrical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Electrical Engineering / 김준동	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-438:월(8B-9),금(8B-9)]
Office hours			

[1] Outline / Purpose

In almost every case, the work of engineers finds application through materials. For example, developments in the understanding of the structure of materials and the engineering of their properties directly led to solid state devices, Moore's Law scaling of transistors, and the resulting revolutionary growth in all aspects of electrical engineering.

영어 (한국어 보조) 기반 강의입니다. 수강 신청에 유의 바랍니다.

[2] Course Learning Outcomes

영어 (한국어 보조) 기반 강의입니다. 수강 신청에 유의 바랍니다.

The future of Electrical Engineering itself is squarely dependent upon the ability to understand, exploit and apply ever-new electronic, photonic and magnetic properties of materials and with the advent of "nanotechnology" the richness of new properties and the impact of materials on electrical engineers has, arguably, never been more significant.

With a greater understanding of materials, electrical engineers are already leaders in the most pressing societal issues, from renewable energy and environmental sustainability to ultra-portable communication and biocompatible medical devices. The primary purpose of this course is to provide an introduction to the interrelation of the structure, properties and processing of materials, with an emphasis on the first two. While the course covers a broad range of materials and properties, special treatment is given to those of particular interest for electrical engineers.

[3] Class Delivery Method

Lectures and discussions

Two lecturers (Prof. Joondong Kim and Prof. Malkeshkumar Patel) are accompanied in these classes

영어 (한국어 보조) 기반 강의입니다. 수강 신청에 유의 바랍니다.

④ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	%	20 %	%	10 %	%	%	%

⑤ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	50 %	%	%	%	%	%	20 %

[4] Grading Policies

④ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Pierret	Publisher		Textbook	Semiconductor Device Fundamentals	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook	To be assigned	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction; materials in electrical engineering
Second week	Atomic structure, bonding, single/poly-crystals, amorphous
Third week	Crystal structure: atomic density and packing
Fourth week	Crystallographic, directions, density, planes
Fifth week	Crystal planes, examples of semiconductor crystals; defects
Sixth week	Metal-semiconductor properties
Seventh week	Phase diagrams; binary systems; lever rule
Eighth week	Introduction to quantum mechanics; wave-particle duality;
Ninth week	Effective mass, intrinsic and extrinsic semiconductors
Tenth week	Midterm exam
Eleventh week	Electrons and holes, density of states, Fermi level, occupancy Probabilities
Twelfth week	Semiconductors
Thirteenth week	Metal and Schottky devices
Fourteenth week	Photoelectric devices
Fifteenth week	Nanotechnology and Energy devices
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	OPTO-ELECTRIC ENERGY APPLICATION ENGINEERING	Course Number	0006688001
Major / School Year	Dept. of Electrical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Electrical Engineering / 윤주형	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-416:월(5B-6),수(2B-3)]
Office hours			

[1] Outline / Purpose

This course is prepared for senior undergraduate students to educate students in the design and applications of solar energy engineering. It will focus on fundamentals of solar energy conversion and photovoltaic, and its system.

[2] Course Learning Outcomes

1. Gain an understanding of the available solar energy and the current solar energy conversion and utilization processes.
2. Have a working knowledge of semiconductor physics, photoelectric effect, photovoltaic(PV) cell operation and characterization, and related to photovoltaic engineering.
3. Experience computer aided design of PV cell with essential skill for presentation of their own design

[3] Class Delivery Method

Lecture is composed of basic background & related theory of the renewable energy source & solar energy, and engineering aspects of solar cells & semiconductor materials will be delivered. Seminar will be prepared by the audience themselves about the result of their own projects – computer aided design of solar cells.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	%	10 %	10 %	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	%	70 %	%	%	%	10 %	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	S. O. KASAP	Publisher	Pearson Education	Textbook	Optoelectronics and Photonics: principles and practices, second edition	Issued year	2013
(2)	Author		Publisher		Textbook	www.pveducation.org (by Christiana Honsberg and Stuart Bowden)	Issued year	
(3)	Author	이준신	Publisher	그린	Textbook	고급태양전지공학	Issued year	2014

[Reference books]

(1)	Author	Jenny Nelson	Publisher	Imperial college, UK	Textbook	The Physics of Solar Cells	Issued year	
(2)	Author	Larry D. Partain	Publisher	Wiley	Textbook	Solar Cells and Their Applications	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction ? renewable energy source & solar energy
Second week	Properties of sun light ? light duality & energy
Third week	Review of semiconductor materials
Fourth week	Materials for Photovoltaic (PV) cell
Fifth week	Building blocks of PV cells – Ohmic, Schottky & pn Junction
Sixth week	Building blocks of PV cells– Ohmic, Schottky & pn Junction
Seventh week	PV Cell Operation
Eighth week	Midterm Exam
Ninth week	Transparent electronics – electrode
Tenth week	Various PV applications I
Eleventh week	Various PV applications II
Twelfth week	Computer Aided Design of Solar Cells
Thirteenth week	Solar Energy Harvesting System
Fourteenth week	Presentation of Team project & Final exam review
Fifteenth week	Presentation of Team project & Final exam review
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	SEMICONDUCTOR DEVICES	Course Number	EPC6016001
Major / School Year	Dept. of Electronics Engineering / 3	completion division / Grade evaluation	/
Department/Professor	/ 정은교	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-433:수(7-8A)] [08-518:목(8B-9)]
Office hours			

[1] Outline / Purpose

This course is intended to provide fundamental knowledge to understand operation principles of semiconductor devices. This course is suitable for undergraduate juniors majoring in Electronics Engineering. Topics include pn junction diodes, Schottky diodes, MOS capacitors, MOSFETs, BJTs, and solar cells.

[2] Course Learning Outcomes

Students who successfully complete this course will be expected to achieve the following:

- an understanding of operation principles of semiconductor devices,
- an understanding of nonidealities of semiconductor devices.

[3] Class Delivery Method

Lecture every week. Details will be announced.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Donald A. Neamen	Publisher		Textbook	Semiconductor physics & devices	Issued year	
(2)	Author	Ben G. Streetman	Publisher		Textbook	Solid state electronic device	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Review of semiconductor theory
Second week	pn diode
Third week	pn diode
Fourth week	MS and heterojunction
Fifth week	MS and heterojunction
Sixth week	The Bipolar Transistor
Seventh week	The Bipolar Transistor
Eighth week	Midterm exam
Ninth week	MOS capacitor
Tenth week	MOS capacitor
Eleventh week	MOS capacitor
Twelfth week	MOSFET
Thirteenth week	MOSFET
Fourteenth week	MOSFET
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	SEMICONDUCTOR DEVICES	Course Number	EPC6016003
Major / School Year	Dept. of Electronics Engineering / 3	completion division / Grade evaluation	/
Department/Professor	/ 이영훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-518:수(8B-9),금(4-5A)]
Office hours			

[1] Outline / Purpose

This course is intended to provide fundamental knowledge to understand the operation principles of semiconductor devices. This course is suitable for undergraduate juniors majoring in Electronics Engineering. Topics include p-n junctions, metal-semiconductor junctions, MOS capacitors, MOSFETs, and BJTs.

[2] Course Learning Outcomes

Students who successfully complete this course will be expected to achieve the following:

- an understanding of the operation principles of semiconductor devices,
- an ability to explain the nonidealities of semiconductor devices.

[3] Class Delivery Method

Lecture every week. Details will be announced.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Ben G. Streetman, Sanjay Kumar Banerjee	Publisher	Pearson Education	Textbook	Solid State Electronic Devices Global Ed, 7/e	Issued year	2015
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Donald A. Neamen	Publisher	McGraw-Hill Higher Education	Textbook	Semiconductor Physics and Devices, 4/e	Issued year	2011
(2)	Author	Simon M. Sze, Yiming Li, Kwok K. Ng	Publisher	Wiley	Textbook	Physics of Semiconductor Devices, 4/e	Issued year	2021
(3)	Author	Yuan Taur, Tak H. Ning	Publisher	Cambridge University Press	Textbook	Fundamentals of Modern VLSI Devices, 3/e	Issued year	2022
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Semiconductor fundamentals 1
Third week	Semiconductor fundamentals 2
Fourth week	p-n junctions 1
Fifth week	p-n junctions 2
Sixth week	Metal-semiconductor junctions
Seventh week	BJTs
Eighth week	Mid-term exam
Ninth week	MOS fundamentals
Tenth week	MOS C-V
Eleventh week	MOS advanced topics
Twelfth week	MOSFET fundamentals
Thirteenth week	MOSFET I-V
Fourteenth week	MOSFET advanced topics
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	SEMICONDUCTOR DEVICES	Course Number	EPC6016002
Major / School Year	Dept. of Electronics Engineering / 3	completion division / Grade evaluation	/
Department/Professor	/ 이영훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-321:수(2B-3)] [08-433:금(5B-6)]
Office hours			

[1] Outline / Purpose

This course is intended to provide fundamental knowledge to understand the operation principles of semiconductor devices. This course is suitable for undergraduate juniors majoring in Electronics Engineering. Topics include p-n junctions, metal-semiconductor junctions, MOS capacitors, MOSFETs, and BJTs.

[2] Course Learning Outcomes

Students who successfully complete this course will be expected to achieve the following:

- an understanding of the operation principles of semiconductor devices,
- an ability to explain the nonidealities of semiconductor devices.

[3] Class Delivery Method

Lecture every week. Details will be announced.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Ben G. Streetman, Sanjay Kumar Banerjee	Publisher	Pearson Education	Textbook	Solid State Electronic Devices Global Ed, 7/e	Issued year	2015
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Donald A. Neamen	Publisher	McGraw-Hill Higher Education	Textbook	Semiconductor Physics and Devices, 4/e	Issued year	2011
(2)	Author	Simon M. Sze, Yiming Li, Kwok K. Ng	Publisher	Wiley	Textbook	Physics of Semiconductor Devices, 4/e	Issued year	2021
(3)	Author	Yuan Taur, Tak H. Ning	Publisher	Cambridge University Press	Textbook	Fundamentals of Modern VLSI Devices, 3/e	Issued year	2022
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Semiconductor fundamentals 1
Third week	Semiconductor fundamentals 2
Fourth week	p-n junctions 1
Fifth week	p-n junctions 2
Sixth week	Metal-semiconductor junctions
Seventh week	BJTs
Eighth week	Mid-term exam
Ninth week	MOS fundamentals
Tenth week	MOS C-V
Eleventh week	MOS advanced topics
Twelfth week	MOSFET fundamentals
Thirteenth week	MOSFET I-V
Fourteenth week	MOSFET advanced topics
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Artificial Intelligence	Course Number	0009463001
Major / School Year	Dept. of Electronics Engineering / 3	completion division / Grade evaluation	/
Department/Professor	/ 조환호	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-325:월(8B-9),수(4-5A)]
Office hours		lecture room	

[1] Outline / Purpose

The purpose of this course is to learn the overall concepts, terminology, and theories related to machine learning and artificial intelligence. Through this, students will gain an intuition for AI development applicable to various fields.
(The scope of this course is limited to conventional machine learning methods prior to deep learning techniques.)

[2] Course Learning Outcomes

Understand the characteristics of data and perform appropriate preprocessing accordingly.
Utilize Python libraries such as NumPy, Pandas, and Scikit-learn required for machine learning processes.
Determine suitable modeling approaches based on the target of modeling.
Appropriately evaluate and present the results of learning.

[3] Class Delivery Method

Theory + Practice

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	20 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	0 %	0 %	0 %	0 %	80 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
70 %	20 %	10 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	자체제작	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Andriy Burkov	Publisher		Textbook	The hundred-page machine learning book	Issued year	
(2)	Author	Ian Goodfellow, Yoshua Bengio and Aaron Courville	Publisher		Textbook	Deep learning	Issued year	
(3)	Author	최성철	Publisher	한빛아카데미	Textbook	데이터과학을 위한 파이썬 머신러닝	Issued year	
(4)	Author	Raschka, Sebastian	Publisher		Textbook	Python Machine Learning : Machine Learning and Deep Learning with Python, scikit-learn, and TensorFlow	Issued year	
(5)	Author	Christopher M. Bishop	Publisher		Textbook	Pattern Recognition and Machine Learning	Issued year	

[Other books]

[6] Weekly lesson plans

First week	Class introduction Introduction to Machine Learning – What is Machine Learning – Machine Learning Keywords – Machine Learning Process – Types of Learning
Second week	Development environment setting guide – Anaconda, PyCharm, Jupyter Notebook, VSCode, Colab Python review – Basic operators, Variable types, Input, Output – Flow of control (if, for, while), List, Tuple, Comprehension
Third week	Python review (Cont'd) – File I/O, Package and Module, Class, Method – Function, Lambda function, Local, Global variable, Recursion Notation and Definitions – Linear algebra, Random variable, Baye's rule etc.
Fourth week	Understanding on data – Concept of data, Feature, representation and label – type of data (numerical, categorical, ordinal) – Pandas
Fifth week	Feature engineering (Cont'd) – Data preprocessing – Numpy (array, methods, function, indexing, slicing etc)
Sixth week	Feature engineering (Cont'd) – Numpy (array, methods, function, indexing, slicing etc) – Feature extraction (1st order statistics, dimension reduction) – Feature selection
Seventh week	Anatomy of learning algorithm – Decision theory, Information theory – Loss function
Eighth week	Midterm exam
Ninth week	Anatomy of learning algorithm – Gradient descent – Three sets – Underfitting and Overfitting
Tenth week	Supervised learning (Regression) – Linear regression (Least-square method) – Lagrangian multiplier, Regularization
Eleventh week	Supervised learning (Regression) – Linear regression (Gradient descent) Performance evaluation for regression – MAE, MSE, Correlation etc.
Twelfth week	Supervised learning (Non-parameteric classifiers) – k-NN, Decision Tree Performance evaluation for classification – Accuracy, Sensitivity, Specificity, ROC etc
Thirteenth week	Supervised learning (Parametric classifiers) – Logistic regression – Support vector machine – Bayesian classifier
Fourteenth week	Unsupervised learning – k-means(Clustering), density estimation, dimension reduction Visualization – matplotlib, seaborn – figure, subplot, plot, histogram, scatter plot etc
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Artificial Intelligence	Course Number	0009463002
Major / School Year	Dept. of Electronics Engineering / 3	completion division / Grade evaluation	/
Department/Professor	/ 조환호	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-325:월(2B-3),수(1-2A)]
Office hours		lecture room	

[1] Outline / Purpose

The purpose of this course is to learn the overall concepts, terminology, and theories related to machine learning and artificial intelligence. Through this, students will gain an intuition for AI development applicable to various fields.
(The scope of this course is limited to conventional machine learning methods prior to deep learning techniques.)

[2] Course Learning Outcomes

Understand the characteristics of data and perform appropriate preprocessing accordingly.
Utilize Python libraries such as NumPy, Pandas, and Scikit-learn required for machine learning processes.
Determine suitable modeling approaches based on the target of modeling.
Appropriately evaluate and present the results of learning.

[3] Class Delivery Method

Theory + Practice

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	20 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	0 %	0 %	0 %	0 %	80 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	자체제작	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Andriy Burkov	Publisher		Textbook	The hundred-page machine learning book	Issued year	
(2)	Author	Ian Goodfellow, Yoshua Bengio and Aaron Courville	Publisher		Textbook	Deep learning	Issued year	
(3)	Author	최성철	Publisher	한빛아카데미	Textbook	데이터과학을 위한 파이썬 머신러닝	Issued year	
(4)	Author	Raschka, Sebastian	Publisher		Textbook	Python Machine Learning : Machine Learning and Deep Learning with Python, scikit-learn, and TensorFlow	Issued year	
(5)	Author	Christopher M. Bishop	Publisher		Textbook	Pattern Recognition and Machine Learning	Issued year	

[Other books]

[6] Weekly lesson plans

First week	Class introduction Introduction to Machine Learning – What is Machine Learning – Machine Learning Keywords – Machine Learning Process – Types of Learning
Second week	Development environment setting guide – Anaconda, PyCharm, Jupyter Notebook, VSCode, Colab Python review – Basic operators, Variable types, Input, Output – Flow of control (if, for, while), List, Tuple, Comprehension
Third week	Python review (Cont'd) – File I/O, Package and Module, Class, Method – Function, Lambda function, Local, Global variable, Recursion Notation and Definitions – Linear algebra, Random variable, Baye's rule etc.
Fourth week	Understanding on data – Concept of data, Feature, representation and label – type of data (numerical, categorical, ordinal) – Pandas
Fifth week	Feature engineering (Cont'd) – Data preprocessing – Numpy (array, methods, function, indexing, slicing etc)
Sixth week	Feature engineering (Cont'd) – Numpy (array, methods, function, indexing, slicing etc) – Feature extraction (1st order statistics, dimension reduction) – Feature selection
Seventh week	Anatomy of learning algorithm – Decision theory, Information theory – Loss function
Eighth week	Midterm exam
Ninth week	Anatomy of learning algorithm – Gradient descent – Three sets – Underfitting and Overfitting
Tenth week	Supervised learning (Regression) – Linear regression (Least-square method) – Lagrangian multiplier, Regularization
Eleventh week	Supervised learning (Regression) – Linear regression (Gradient descent) Performance evaluation for regression – MAE, MSE, Correlation etc.
Twelfth week	Supervised learning (Non-parameteric classifiers) – k-NN, Decision Tree Performance evaluation for classification – Accuracy, Sensitivity, Specificity, ROC etc
Thirteenth week	Supervised learning (Parametric classifiers) – Logistic regression – Support vector machine – Bayesian classifier
Fourteenth week	Unsupervised learning – k-means(Clustering), density estimation, dimension reduction Visualization – matplotlib, seaborn – figure, subplot, plot, histogram, scatter plot etc
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	RADIO ENGINEERING	Course Number	EPC6015001
Major / School Year	Dept. of Electronics Engineering / 3	completion division / Grade evaluation	/
Department/Professor	/ 윤영노	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-223:월(5B-6)] [08-321:목(1-2A)]
Office hours			

[1] Outline / Purpose

본 과목을 통하여 전자파의 기본인 Maxwell 방정식을 이해하고, 이를 활용하여 임의 공간과 전송선로 등 다양한 환경의 전파 특성을 분석하고자 한다. 임의 공간의 평면파 특성 및 경계면의 전파 환경을 분석하고, 전송선로에서의 전자파 전송 모드를 제시한다. 또한 전송선로를 회로이론 관점에서 접근하여 설명하는 방법과 안테나의 전자파 송수신 원리를 살펴보고 수치해석 및 시뮬레이터를 이용한 해석 방법을 학습한다.

[2] Course Learning Outcomes

1. 해석적, 수치적 접근을 통한 Maxwell 방정식의 이해
2. 평면파 특성, 경계면에서의 전파 특성 분석
3. 전송 선로의 동작 이론 및 스미스 차트 이해
4. 전자파의 송수신 원리 및 안테나의 동작 원리

[3] Class Delivery Method

각 주제에 대한 강의 위주로 진행되며 문제 풀이에 대한 참여를 통하여 해결능력을 배양한다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	David M. Pozar	Publisher	Wiley	Textbook	Microwave Engineering	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	전파공학 소개, 전파 통신 개요
Second week	Maxwell Equation
Third week	Wave Equation
Fourth week	Boundary Condition
Fifth week	Transmission Line
Sixth week	Smith Chart
Seventh week	Waveguide
Eighth week	중간고사 (4월 21일 19시)
Ninth week	Microwave Network Analysis
Tenth week	Impedance Matching and Tuning (5월 5일 공휴일 휴강)
Eleventh week	Power Divider
Twelfth week	Directional Coupler
Thirteenth week	Filter
Fourteenth week	Antenna
Fifteenth week	기말고사 (6월 9일 19시)
Sixteenth week	보강

[7] Assignments

The first assignment	assignment	문제 풀이 과제#1	submission date	2025-04-17 Thu
	purpose			
	procedure & notice			
	references			
The second assignment	assignment	문제 풀이 과제#2	submission date	2025-06-05 Thu
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	RADIO ENGINEERING	Course Number	EPC6015002
Major / School Year	Dept. of Electronics Engineering / 3	completion division / Grade evaluation	/
Department/Professor	/ 윤영노	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-321:월(4-5A),목(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

본 과목을 통하여 전자파의 기본인 Maxwell 방정식을 이해하고, 이를 활용하여 임의 공간과 전송선로 등 다양한 환경의 전파 특성을 분석하고자 한다. 임의 공간의 평면파 특성 및 경계면의 전파 환경을 분석하고, 전송선로에서의 전자파 전송 모드를 제시한다. 또한 전송선로를 회로이론 관점에서 접근하여 설명하는 방법과 안테나의 전자파 송수신 원리를 살펴보고 수치해석 및 시뮬레이터를 이용한 해석 방법을 학습한다.

[2] Course Learning Outcomes

1. 해석적, 수치적 접근을 통한 Maxwell 방정식의 이해
2. 평면파 특성, 경계면에서의 전파 특성 분석
3. 전송 선로의 동작 이론 및 스미스 차트 이해
4. 전자파의 송수신 원리 및 안테나의 동작 원리

[3] Class Delivery Method

각 주제에 대한 강의 위주로 진행되며 문제 풀이에 대한 참여를 통하여 해결능력을 배양한다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	David M. Pozar	Publisher	Wiley	Textbook	Microwave Engineering	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	전파공학 소개, 전파 통신 개요
Second week	Maxwell Equation
Third week	Wave Equation
Fourth week	Boundary Condition
Fifth week	Transmission Line
Sixth week	Smith Chart
Seventh week	Waveguide
Eighth week	중간고사 (4월 21일 19시)
Ninth week	Microwave Network Analysis
Tenth week	Impedance Matching and Tuning (5월 5일 공휴일 휴강)
Eleventh week	Power Divider
Twelfth week	Directional Coupler
Thirteenth week	Filter
Fourteenth week	Antenna
Fifteenth week	기말고사 (6월 9일 19시)
Sixteenth week	보강

[7] Assignments

The first assignment	assignment	문제 풀이 과제#1	submission date	2025-04-17 Thu
	purpose			
	procedure & notice			
	references			
The second assignment	assignment	문제 풀이 과제#2	submission date	2025-06-05 Thu
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	VLSI Design	Course Number	0010903001
Major / School Year	Dept. of Electronics Engineering / 4	completion division / Grade evaluation	/
Department/Professor	/ 나태희	Grades/Lecture/ Practice	3 / 2 / 2
Phone Number		A weekday / class / lecture room	[08-325:월(5)(6),목(5)(6)]
Office hours			

[1] Outline / Purpose

VLSI circuit (CMOS integrated circuit) is an electronic device that integrates a large number of electronic components on a small semiconductor chip.

This course will focus on integrated circuit design using transistors and gates.

[2] Course Learning Outcomes

After this course, the students can

- (i) describe about embedded system and integrated circuit.
- (ii) describe what is CMOS logic (inverter, NAND, NOR, multiplexer, sequential circuit).
- (iii) describe how can the speed and power of integrated circuits be optimized.
- (iv) deal with the development tools such as vi editor and various simulators (Virtuoso Schematic Editor, Hspice, Spectre, Custom waveview, etc.).
- (v) organize a cross functional team to execute a project by defining and performing the role of each member.
- (vi) use the communication tools in meetings, and properly present the results of the project.

[3] Class Delivery Method

First, lectures will be provided for building up the theoretical background including the modeling of integrated circuits and systems, and some details of techniques for designing integrated circuits. Also, the students will learn how to deal with various tools to design, simulate, and verify integrated circuits in lectures.

Following that, the students will experience industrial-strength design practices through a complete set of step-by-step labs.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	0 %	0 %	0 %	0 %	90 %	0 %

[4] Grading Policies

Midterm Exam 30%, Term Project 30%, Lab HW 20%, Attendance 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Neil H. E. Weste	Publisher	Pearson	Textbook	Integrated Circuit Design, Fourth Edition	Issued year	2010
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	– Lecture1 (Introduction to this Course) – Lab1
Second week	– Lecture2 (Introduction to Integrated Circuit) – Lab2
Third week	– Lecture3 (Circuits & Layout) – Lab3
Fourth week	– Lecture4 (Circuits & Layout) – Lab4
Fifth week	– Lecture5 (Circuits & Layout) – Lab5
Sixth week	– Lecture6 (DC & Transient Response) – Lab6
Seventh week	– Lecture7 (DC & Transient Response) – Lab7
Eighth week	– Midterm Exam
Ninth week	– Lecture8 (Logical Effort) – Lab8
Tenth week	– Lecture9 (Logical Effort) – Lab9
Eleventh week	– Lecture10 (Adder) – Lab10
Twelfth week	– Lecture11 (Power) – Lab11
Thirteenth week	– Term Project
Fourteenth week	– Term Project
Fifteenth week	– Term Project: Presentation
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	SOLID STATE ELECTRONIC DEVICE	Course Number	EPC6069001
Major / School Year	Dept. of Electronics Engineering / 4	completion division / Grade evaluation	/
Department/Professor	/ 진성훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-326:월(2B-3),목(2B-3)]
Office hours			

[1] Outline / Purpose

- (1) Deep submicron CMOS의 동작 원리 및 아날로그, 디지털, RF 성능 지수에 대한 기본 지식 함양.
- (2) Deep submicron CMOS의 SPICE 변수 추출.

[2] Course Learning Outcomes

- (1) CMOS 소자의 동작 원리 이해를 기반으로 CMOS 소자의 분석 기술 확보
- (2) SPICE 모델을 통한 소자의 특성 변수 도출 방법론 확보
- (3) Deep submicron CMOS소자의 설계 능력 배양

[3] Class Delivery Method

- (1) 오프라인 강의 진행

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	40 %	0 %	40 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Yuan Taur	Publisher	Cambridge university	Textbook	Fundamental of modern VLSI devices	Issued year	1998
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Y. P. Tisivids	Publisher	McGrawHill	Textbook	Operation and modeling of the CMOS transistor	Issued year	1987
(2)	Author	C.Y. Chang	Publisher	John wiley & son, inc.	Textbook	ULSI device	Issued year	2000
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	-강의 소개 -Introduction of modern VLSI technology
Second week	Electrons and holes in silicon
Third week	P-N junction
Fourth week	MOS capacitors
Fifth week	High field effects
Sixth week	Long channel MOSFETs
Seventh week	MOSFET channel mobility
Eighth week	Short channel MOSFETs
Ninth week	중간고사 (대면 시험)
Tenth week	세미나 발표
Eleventh week	Source- drain resistances
Twelfth week	MOSFET scaling
Thirteenth week	Threshold voltages
Fourteenth week	Device performances
Fifteenth week	기말고사 (대면 시험)
Sixteenth week	

[7] Assignments

The first assignment	assignment	MOS C-V characteristics	submission date	
	purpose	MOS capacitor understanding		
	procedure & notice			
	references			
The second assignment	assignment	MOSFET I-V characteristics	submission date	
	purpose	MOSFET understanding		
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	WIRELESS COMMUNICATION SYSTEM	Course Number	EPC6030001
Major / School Year	Dept. of Electronics Engineering / 4	completion division / Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-419:화(5B-6),목(8B-9)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	WIRELESS COMMUNICATION SYSTEM	Course Number	EPC6030002
Major / School Year	Dept. of Electronics Engineering / 4	completion division / Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-223:화(2B-3),목(7-8A)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to smart systems	Course Number	0007805001
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/ 정은교	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-223:목(4),금(4)(5)]
Office hours			

[1] Outline / Purpose

This course introduces basic design principles of smart systems. Students learn how to design and implement smart systems for IoT services using Arduino as a platform.

[2] Course Learning Outcomes

1. Understand smart systems
2. Learn design principles using simulation
3. Build a prototype using Arduino simulation

[3] Class Delivery Method

Lecture, presentation, discussion

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
40 %	20 %	0 %	40 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	0 %	0 %	40 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Lab 1
Third week	Lab 2
Fourth week	Lab 3
Fifth week	Lab 4
Sixth week	Lab 5
Seventh week	Lab 6
Eighth week	Mid-term
Ninth week	Lab 7
Tenth week	Lab 8
Eleventh week	Lab 9
Twelfth week	Lab 10
Thirteenth week	Lab 11
Fourteenth week	Lab 12
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to smart systems	Course Number	0007805002
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/ 정은교	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-223:목(5)] [08-433:금(2)(3)]
Office hours			

[1] Outline / Purpose

This course introduces basic design principles of smart systems. Students learn how to design and implement smart systems for IoT services using Arduino as a platform.

[2] Course Learning Outcomes

1. Understand smart systems
2. Learn design principles using simulation
3. Build a prototype using Arduino simulation

[3] Class Delivery Method

Lecture, presentation, discussion

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
40 %	20 %	0 %	40 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	0 %	0 %	40 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Lab 1
Third week	Lab 2
Fourth week	Lab 3
Fifth week	Lab 4
Sixth week	Lab 5
Seventh week	Lab 6
Eighth week	Mid-term
Ninth week	Lab 7
Tenth week	Lab 8
Eleventh week	Lab 9
Twelfth week	Lab 10
Thirteenth week	Lab 11
Fourteenth week	Lab 12
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PROGRAMMING LANGUAGE	Course Number	EPC6046001
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/ 박재삼	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-326:월(5B-6),수(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

This course is to get a basic understanding of the C and C++ languages and gain the ability to write and API and MFC application using Visual C++ for Windows. This course expects students to have learned about the C language beforehand however the first four weeks will be focused on introduction to the C++ language to allow all students to be able to catch up without prior studies. There will be a focus on the development of API and MFC applications after the basic introduction to the C and C++ languages. The aim of this class, allowing the students to build a foundation of programming in a Windows environment, will be achieved by focusing on the principles and flow of the C++ language, followed by API programming. This means that the students can expect to be involved in developing an application rather than understand the in-depth theory behind it to serve as a basis to the fields of study the students will pursue in the future.

[2] Course Learning Outcomes

In this class the students will study the C++ language and its syntax as well as WinAPI programming. Upon completion, students will be able to write basic C++ applications, understand existing applications written in C/C++, WinAPI Software Development and embedded programming. This class is not just for learning basic C++, but becomes the foundations for Electronics Engineering students as a prerequisite for MFC, ATL and .NET framework which is the next step towards microprocessor applications.

[3] Class Delivery Method

All lectures will be given in English. The lecture will be conducted through video lectures using zoom because of COVID-19 . The midterm and final exams will be taken in the computer lab. The lecture involves developing and executing an application of the course contents after a brief overview to aid in understanding and experiencing the topic at hand. The lecture will progress with the main focus on the lecturer's notes, however the students can refer to other Korean reference materials to aid in understanding parts which may prove to be difficult to follow from the English lecture notes. The program used in this course will be Microsoft Visual Studio 2019. Further reference materials will be provided on top of the lecture notes to fill in any missing parts on the notes.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	0 %	0 %	30 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	40 %	0 %	0 %	0 %	60 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kim dong keun	Publisher	Kame publisher	Textbook	Learn API Programming with Examples	Issued year	2019
(2)	Author	Oh, Jin Whan	Publisher	ComSpace	Textbook	Visual studio 2010 Programming Visual C++/API	Issued year	2015
(3)	Author	J.S.Park	Publisher	INU	Textbook	Lecture Note	Issued year	2024

[Reference books]

(1)	Author	정일홍	Publisher	생능출판	Textbook	Visual C++ 2010	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Part 1 Basic Visual C++ Introduction Create a new Visual C++ Project Compiling and Running the Project Saving a Project Importing a Project Hungarian Notation Configurations of Windows OS What is the message? What is an event? Frequently used message
Second week	Win32 Consol Application Program Basics Input Output Messages
Third week	MFC Application Program Basics Output a message box on button click Hiding a button Preventing button click Output text in the edit box to the message box
Fourth week	Variable and Variable Declaration Win32 Consol Application vs. MFC Application variable, constant, Types of constant Variable declaration Integer variable declaration Float variable declaration Character type variable declaration Reserved words Operations and Operation
Fifth week	MFC Application – Input and Control Statements Finding the user's information Receive integers, strings, values Loop and condition flow
Sixth week	MFC Application – Array and Pointer Receive integers to put into array and then output Output the integers in the memory location of the array Tutorial
Seventh week	MFC Application – Class Public, Protected, Private Tutorial
Eighth week	Mid-term examination
Ninth week	Windows API Programming Output a message window Output a window Output text on a window Output text using WM_PAINT Changing the x,y position of the window Window with a menu Mouse Mouse cursor control
Tenth week	Timer Measuring the seconds Installing two timers Drawing lines, Dots Creating Buttons, Editor Box, Message Box Output a message box on mouse click Editor box
Eleventh week	Bitmap Opening a Bitmap file Making a simple game Circle Movement Circle moving horizontally, vertically, freely
Twelfth week	Dice Game Output the sum of two dice Plane Movement Output Background
Thirteenth week	Airplane Game Foreground Background
Fourteenth week	Making a Tetris Game Output a single block Output of different shapes of blocks Drawing the background Tetris Game

Fifteenth week	Final examination
Sixteenth week	

[7] Assignments

The first assignment	assignment	Report 1: Visual C++ Programming	submission date	
	purpose	C++ program building abilities to check the usage of functions, loop control, class, pointer and array etc.		
	procedure & notice	Submit through email. Late submission will get less mark.		
	references	주교재, 참고문헌, 기타 Visual C++ 관련 서적. 인터넷 자료 조사를 권장함		
The second assignment	assignment	Report 2: Visual C++ API Programmin	submission date	
	purpose	To check the abilities of Visual C++ API Window application programming.		
	procedure & notice	Submit through email. Late submission will get less mark.		
	references	주교재, 참고문헌, 기타 Visual C++ 관련 서적. 인터넷 자료 조사를 권장함		
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PROGRAMMING LANGUAGE	Course Number	EPC6046002
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/ 박재삼	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-326:월(8B-9),수(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

This course is to get a basic understanding of the C and C++ languages and gain the ability to write and API and MFC application using Visual C++ for Windows. This course expects students to have learned about the C language beforehand however the first four weeks will be focused on introduction to the C++ language to allow all students to be able to catch up without prior studies. There will be a focus on the development of API and MFC applications after the basic introduction to the C and C++ languages. The aim of this class, allowing the students to build a foundation of programming in a Windows environment, will be achieved by focusing on the principles and flow of the C++ language, followed by API programming. This means that the students can expect to be involved in developing an application rather than understand the in-depth theory behind it to serve as a basis to the fields of study the students will pursue in the future.

[2] Course Learning Outcomes

In this class the students will study the C++ language and its syntax as well as WinAPI programming. Upon completion, students will be able to write basic C++ applications, understand existing applications written in C/C++, WinAPI Software Development and embedded programming. This class is not just for learning basic C++, but becomes the foundations for Electronics Engineering students as a prerequisite for MFC, ATL and .NET framework which is the next step towards microprocessor applications.

[3] Class Delivery Method

All lectures will be given in English. The lecture will be conducted through video lectures using zoom because of COVID-19 . The midterm and final exams will be taken in the computer lab. The lecture involves developing and executing an application of the course contents after a brief overview to aid in understanding and experiencing the topic at hand. The lecture will progress with the main focus on the lecturer's notes, however the students can refer to other Korean reference materials to aid in understanding parts which may prove to be difficult to follow from the English lecture notes. The program used in this course will be Microsoft Visual Studio 2019. Further reference materials will be provided on top of the lecture notes to fill in any missing parts on the notes.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	0 %	0 %	30 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	40 %	0 %	0 %	0 %	60 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kim dong keun	Publisher	Kame publisher	Textbook	Learn API Programming with Examples	Issued year	2019
(2)	Author	Oh, Jin Whan	Publisher	ComSpace	Textbook	Visual studio 2010 Programming Visual C++/API	Issued year	2015
(3)	Author	J.S.Park	Publisher	INU	Textbook	Lecture Note	Issued year	2024

[Reference books]

(1)	Author	정일홍	Publisher	생능출판	Textbook	Visual C++ 2010	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Part 1 Basic Visual C++ Introduction Create a new Visual C++ Project Compiling and Running the Project Saving a Project Importing a Project Hungarian Notation Configurations of Windows OS What is the message? What is an event? Frequently used message
Second week	Win32 Consol Application Program Basics Input Output Messages
Third week	MFC Application Program Basics Output a message box on button click Hiding a button Preventing button click Output text in the edit box to the message box
Fourth week	Variable and Variable Declaration Win32 Consol Application vs. MFC Application variable, constant, Types of constant Variable declaration Integer variable declaration Float variable declaration Character type variable declaration Reserved words Operations and Operation
Fifth week	MFC Application – Input and Control Statments Finding the user's information Receive integers, strings, values Loop and condition flow
Sixth week	MFC Application – Array and Pointer Receive integers to put into array and then output Output the integers in the memory location of the array Tutorial
Seventh week	MFC Application – Class Public, Protected, Private Tutorial
Eighth week	Mid-term examination
Ninth week	Windows API Programming Output a message window Output a window Output text on a window Output text using WM_PAINT Changing the x,y position of the window Window with a menu Mouse Mouse cursor control
Tenth week	Timer Measuring the seconds Installing two timers Drawing lines, Dots Creating Buttons, Editor Box, Message Box Output a message box on mouse click Editor box
Eleventh week	Bitmap Opening a Bitmap file Making a simple game Circle Movement Circle moving horizontally, vertically, freely
Twelfth week	Dice Game Output the sum of two dice Plane Movement Output Background
Thirteenth week	Airplane Game Foreground Background
Fourteenth week	Making a Tetris Game Output a single block Output of different shapes of blocks Drawing the background Tetris Game

Fifteenth week	Final examination
Sixteenth week	

[7] Assignments

The first assignment	assignment	Report 1: Visual C++ Programming	submission date	
	purpose	C++ program building abilities to check the usage of functions, loop control, class, pointer and array etc.		
	procedure & notice	Submit through email. Late submission will get less mark.		
	references	주교재, 참고문헌, 기타 Visual C++ 관련 서적. 인터넷 자료 조사를 권장함		
The second assignment	assignment	Report 2: Visual C++ API Programmin	submission date	
	purpose	To check the abilities of Visual C++ API Window application programming.		
	procedure & notice	Submit through email. Late submission will get less mark.		
	references	주교재, 참고문헌, 기타 Visual C++ 관련 서적. 인터넷 자료 조사를 권장함		
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Next Generation Communications	Course Number	0011438001
Major / School Year	/ 4	completion division /Grade evaluation	/
Department/Professor	/ 김훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-325:목(2B-3)] [08-326:수(1-2A)]
Office hours			

[1] Outline / Purpose

Introduction to Next-Generation Communication Technologies: 6G and AI Communication

[2] Course Learning Outcomes

Understanding the Evolution of Communication Systems, Key Requirements, and Technologies for Next-Generation Communication

[3] Class Delivery Method

Lecture, Seminar, and Related Activities

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Introduction
Second week	Evolution of Communication Systems (1)
Third week	Evolution of Communication Systems (2)
Fourth week	Key Technologies in Communication Systems (1)
Fifth week	Key Technologies in Communication Systems (2)
Sixth week	Key Technologies in Communication Systems (3)
Seventh week	Key Technologies in Communication Systems (4)
Eighth week	Midterm Exam
Ninth week	AI and Data (1)
Tenth week	AI and Data (2)
Eleventh week	AI and Data Issues in Next-Generation Communication (1)
Twelfth week	AI and Data Issues in Next-Generation Communication (2)
Thirteenth week	Assignment (1)
Fourteenth week	Assignment (2)
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Next Generation Communications	Course Number	0011438002
Major / School Year	/ 4	completion division /Grade evaluation	/
Department/Professor	/ 김훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-325:수(2B-3),목(1-2A)]
Office hours			

[1] Outline / Purpose

Introduction to Next-Generation Communication Technologies: 6G and AI Communication

[2] Course Learning Outcomes

Understanding the Evolution of Communication Systems, Key Requirements, and Technologies for Next-Generation Communication

[3] Class Delivery Method

Lecture, Seminar, and Related Activities

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Introduction
Second week	Evolution of Communication Systems (1)
Third week	Evolution of Communication Systems (2)
Fourth week	Key Technologies in Communication Systems (1)
Fifth week	Key Technologies in Communication Systems (2)
Sixth week	Key Technologies in Communication Systems (3)
Seventh week	Key Technologies in Communication Systems (4)
Eighth week	Midterm Exam
Ninth week	AI and Data (1)
Tenth week	AI and Data (2)
Eleventh week	AI and Data Issues in Next-Generation Communication (1)
Twelfth week	AI and Data Issues in Next-Generation Communication (2)
Thirteenth week	Assignment (1)
Fourteenth week	Assignment (2)
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Energy Materials and Engineering	Course Number	0011497001
Major / School Year	Dept. of Materials Science and Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 이미경	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-503:화(8B-9),목(2B-3)]
Office hours			

[1] Outline / Purpose

1. Review today's energy sources and discuss the future energy sources for a sustainable energy society
2. Learn about diverse energy devices
3. Discuss the way to overcome the representative environmental issues

[2] Course Learning Outcomes

The student can learn about lots of renewable energy and diverse systems for its production. Also, we discuss the limitations of current energy, specifically environmental issues, then we find the solution to overcome these issues.

[3] Class Delivery Method

The class utilized the PPT slides covering the books and research papers.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	10 %	30 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Lecture overview and introduction
Second week	Production and utilization of hydrogen energy
Third week	Basic electrochemistry
Fourth week	(Photo)electrochemical water splitting Group presentation
Fifth week	Solar cell Group presentation
Sixth week	PV-PEC tandem cell Group presentation
Seventh week	Fuel cell
Eighth week	Midterm exam
Ninth week	Battery 1
Tenth week	Battery 2
Eleventh week	CCUS (specifically CO ₂ capture)
Twelfth week	CCUS (specifically CO ₂ conversion), Group presentation
Thirteenth week	LCA and TEA Group presentation
Fourteenth week	Waste upcycling
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Electronic Materials Engineering	Course Number	0011498001
Major / School Year	Dept. of Materials Science and Engineering / 2	completion division /Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 강영호	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-385:월(5B-6),화(1-2A)]
Office hours			

[1] Outline / Purpose

This course will teach the theoretical basis for understanding the electrical properties of materials. In addition, various applications of electronic materials will be introduced.

[2] Course Learning Outcomes

Understanding of theories and models for electronic materials

[3] Class Delivery Method

PPT slides and hand writing

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Handout	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Safa Kasap	Publisher		Textbook	Principles of Electronic Materials and Devices	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course overview
Second week	Review of electromagnetism 1
Third week	Review of electromagnetism 2
Fourth week	Elementary materials science 1
Fifth week	Elementary materials science 2
Sixth week	Electrical conduction in solids 1
Seventh week	Electrical conduction in solids 2
Eighth week	Midterm
Ninth week	Dielectric response of insulators
Tenth week	Modern theory of solids 1
Eleventh week	Modern theory of solids 2
Twelfth week	Semiconductors 1
Thirteenth week	Semiconductors 2
Fourteenth week	Introduction to semiconductor devices
Fifteenth week	Finals
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Basic Electrochemistry	Course Number	0009478001
Major / School Year	Dept. of Materials Science and Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 이미경	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-385:화(2B-3)] [08-503:목(5B-6)]
Office hours			

[1] Outline / Purpose

This course aims to present the fundamentals, principles, and experimental techniques of electrochemistry, the backgrounds of ionic or electronic conduction of metal, semiconductor, inorganic materials, and the applications.

[2] Course Learning Outcomes

Understand the basic theory for electrochemical reactions and apply it to various energy-related applications.

[3] Class Delivery Method

Handout

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm Exam 35%

Final Exam 35%

Attendance, HW, Quiz 30 %

① Percentage of grade evaluation

Exam	Attendance	Assignment
70 %	20 %	10 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	-	Publisher	-	Textbook	hand out	Issued year	
(2)	Author	A.J. Bard, L. R. Faulkner	Publisher	Wiley	Textbook	Electrochemical Methods	Issued year	
(3)	Author	오승모	Publisher	자유아카데미	Textbook	전기화학	Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

-

[6] Weekly lesson plans

First week	1.	Introduction of electrode processes
Second week	2.	Potentials and thermodynamics
Third week	3.	Kinetics of electrode reactions
Fourth week	4.	Mass transfer
Fifth week	5.	Potential step method
Sixth week	6.	Potential sweep method
Seventh week	7.	Controlled current techniques
Eighth week	Midterm	
Ninth week	8.	hydrodynamic method
Tenth week	9.	Impedance
Eleventh week	9.	Impedance
Twelfth week	10.	Double layer and adsorption
Thirteenth week	11.	Electroactive layers & modified electrodes
Fourteenth week	12.	Electrochemical instrumentation
Fifteenth week	Final exam	
Sixteenth week		

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MODERN PHYSICS	Course Number	EH06066001
Major / School Year	Dept. of Materials Science and Engineering / 2	completion division /Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 이한보람	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-385:월(7-8A)] [08-503:화(4-5A)]
Office hours			

[1] Outline / Purpose

In this class, the modern physics which has been developed from 1900s by various physicists will be introduced to understand many fundamentals behind modern electronics and nanoscale devices.

[2] Course Learning Outcomes

Understanding the concept of modern physics

[3] Class Delivery Method

Lecture, team project

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	%	90 %	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Arthur Beiser	Publisher	McGraw-Hill	Textbook	Concept of modern physics (6th ed)	Issued year	
(2)	Author	Han-Bo-Ram Lee	Publisher		Textbook	Lecture note	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Richard Feynman	Publisher	Basic Books	Textbook	The Feynman lectures on Physics	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course overview & Relativity
Second week	Particle properties of waves I
Third week	Particle properties of waves II
Fourth week	Wave properties of particles I
Fifth week	Wave properties of particles II
Sixth week	Atomic structure I
Seventh week	Atomic structure II
Eighth week	Mid term
Ninth week	Quantum mechanics I
Tenth week	Quantum mechanics II
Eleventh week	Quantum mechanics III
Twelfth week	Statistical mechanics I
Thirteenth week	Statistical mechanics II
Fourteenth week	Solid state I
Fifteenth week	Solid state II
Sixteenth week	Final exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Numerical analysis for materials science	Course Number	0010912001
Major / School Year	Dept. of Materials Science and Engineering / 3	completion division /Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 강영호	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-268:월(2B-3),수(2B-3)]
Office hours			

[1] Outline / Purpose

This course aims to learn how to solve engineering problems using a computer.

[2] Course Learning Outcomes

- Learning how to use MATLAB
- Algorithms to solve math problems related to engineering

[3] Class Delivery Method

- Power point and demonstration

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Handout	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Steven Chapra	Publisher		Textbook	Class materials: Applied Numerical Methods with MATLAB for Engineers and Scientists (4th edition)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course overview
Second week	Matlab Fundamentals
Third week	Solving root and optimization problems 1
Fourth week	Solving sets of linear equations 1
Fifth week	Solving sets of linear equations 2
Sixth week	Regression methods 1
Seventh week	Regression methods 2
Eighth week	Midterm
Ninth week	Numerical integration
Tenth week	Numerical differentiation
Eleventh week	Numerical solution to differential equation 1
Twelfth week	Numerical solution to differential equation 2
Thirteenth week	Eigenvalue problem
Fourteenth week	Applications
Fifteenth week	Finals
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Microelectronic Processing	Course Number	EQA6106001
Major / School Year	Dept. of Materials Science and Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 이한보람	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-385:화(7-8A),수(5B-6)]
Office hours			

[1] Outline / Purpose

This class is designed for the 3rd year undergraduate students to understand the modern integrated circuit fabrication, in other words, the manufacturing of Si device. In this class, we will study about the development history of the modern Si device and the background and fundamentals of each unit process, such as wafer preparation, diffusion, doping, deposition, lithography, etching, and interconnect. This is the first part of a 1-year-course and the second part will be in the Fall Semester with the name of 'Semiconductor Device Fabrication 2.'

[2] Course Learning Outcomes

Understanding the modern integrated circuit fabrication

[3] Class Delivery Method

Lecture, assignment, quiz

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Mid term: 30 %

Final: 30 %

Assignments & Random Quiz: 20 %

Attendance: 20 %

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Plummer and Griffin, Stanford University	Publisher	Cambridge University Press	Textbook	Integrated Circuit Fabrication	Issued year	
(2)	Author	Han-Bo-Ram Lee	Publisher		Textbook	Lecture note	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	1. Course overview
Second week	2. Moore's Law and Future Technology Prospects
Third week	2. Moore's Law and Future Technology Prospects
Fourth week	3. Modern CMOS Technology
Fifth week	3. Modern CMOS Technology
Sixth week	4. Crystal Growth, Wafer Preparation and Material Properties
Seventh week	4. Crystal Growth, Wafer Preparation and Material Properties
Eighth week	Mid term exam
Ninth week	5. Clean Rooms, Wafer Cleaning, Gettering and Chip Yield
Tenth week	5. Clean Rooms, Wafer Cleaning, Gettering and Chip Yield
Eleventh week	6. Lithography
Twelfth week	6. Lithography
Thirteenth week	7. Semiconductor/Insulator Interfaces
Fourteenth week	7. Semiconductor/Insulator Interfaces
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PHYSICAL CHEMISTRY FOR MATERIALS SCIENCE(2)	Course Number	EQA6058001
Major / School Year	Dept. of Materials Science and Engineering / 3	completion division /Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 장태후	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-385:화(4-5A)] [08-503:월(5B-6)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Materials Electromagnetics	Course Number	0011908001
Major / School Year	Dept. of Materials Science and Engineering / 3	completion division /Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 장태후	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-503:월(8B-9),수(8B-9)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	VACUUM ENGINEERING	Course Number	EQA6111001
Major / School Year	Dept. of Materials Science and Engineering / 4	completion division /Grade evaluation	/
Department/Professor	Dept. of Materials Science and Engineering / 장태후	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-503:월(2B-3),목(7-8A)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	RELIABILITY ENGINEERING	Course Number	EQB6024001
Major / School Year	Dept. of Safety Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 김태완	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-338:화(5B-6)] [08-534:수(2B-3)]
Office hours			

[1] Outline / Purpose

Reliability Engineering aims at calculating the life distribution of components and systems, and the success probability of systems at given time and time window. This course introduces methods to quantify the system reliability with stochastic and statistical bases. In addition, the relationship between reliability and safety/risk of systems is addressed comprehensively.

[2] Course Learning Outcomes

- To understand reliability concepts
- To identify important factors in estimating reliability
- To understand ways to improve reliability

[3] Class Delivery Method

Mainly lecture-based teaching.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Lecture Material	Issued year	
(2)	Author	Paul A. Tobias, David Trindade	Publisher	CRC Press	Textbook	Applied Reliability	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	서순근 외	Publisher	교보문고	Textbook	신뢰성공학	Issued year	
(2)	Author	제무성	Publisher	시그마프레스	Textbook	계통신뢰도 공학	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Reliability Concepts
Third week	Basic Statistics (I)
Fourth week	Basic Statistics (II)
Fifth week	Reliability Measure
Sixth week	Reliability Block Diagram and System Reliability
Seventh week	Redundency
Eighth week	Midterm Exam
Ninth week	Failure Models
Tenth week	Failure Analysis – FMEA, FTA and ETA
Eleventh week	Repairable System Analysis
Twelfth week	Maintainability
Thirteenth week	Lifetime Data Analysis
Fourteenth week	Reliability Analysis for Safety Systems
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	THERMODYNAMICS	Course Number	EQB6029001
Major / School Year	Dept. of Safety Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 이민철	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-534:월(5B-6),수(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

This course is an undergraduate course that is able to understand the energy flow in the natural world including heat and work and heat phenomenon, and it is a basic dynamics course closely related to fields of energy, chemical, combustion, heat transfer, fire, fire protection and etc.

In this lecture, students will understand the concepts of temperature, pressure, state, closed system, open system, isolated system, internal energy, enthalpy and entropy. This lecture is also aiming to raise the capability to solve the thermodynamic problem of closed system and open system, and to perform the analysis of a simple cycle by applying mass conservation law and first, second and third thermodynamic laws.

[2] Course Learning Outcomes

To understand the concept of thermodynamic properties and laws, and their applications.

To build up the ability for calculating each thermodynamic status(pressure, temperature, enthalpy, entropy and etc.) of various thermodynamic cycle.

[3] Class Delivery Method

Most lecture will be given in the class room by utilizing PPT files which will be uploaded in e-learning website.

To increase understanding and to enhance interest, educational movies and calculation programs will also be utilized.

This lecture will be given in the blended methods of on-line and off-line classes(so call Filled learning).

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	0 %	0 %	0 %	0 %	0 %	20 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	80 %	20 %

[4] Grading Policies

Exam : 60%

Attendance : 20%

Assignment : 20%

Other score rating directions regarding early leaving, lateness and etc. will be followed by rules and codes of University.

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Yunus A. Cengel, Michael A. Boles	Publisher	McGraw-Hill	Textbook	Thermodynamics: An Engineering Approach (8th Edition in SI Units)	Issued year	2015
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	William Z. Black and James G. Hartley	Publisher	HarperCollins Publishers Inc.	Textbook	Thermodynamics 3rd ed.	Issued year	1996
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Lecture Outline, Introduction to Thermodynamics
Second week	History of Thermodynamics Concepts of Thermodynamics (1)
Third week	Concepts of Thermodynamics (2)
Fourth week	Energy, Energy Transfer and Energy Analysis (1)
Fifth week	Energy, Energy Transfer and Energy Analysis (2)
Sixth week	Properties of Pure Substances (1)
Seventh week	Properties of Pure Substances (2) Flipped learning
Eighth week	Midterm Exam (Midterm Exam can be substituted by home assignments)
Ninth week	Energy Analysis in Closed System (1)
Tenth week	Energy Analysis in Closed System (2)
Eleventh week	Mass and Energy Analysis in Control Volume (1)
Twelfth week	Mass and Energy Analysis in Control Volume (2)
Thirteenth week	2nd Law of Thermodynamics (1)
Fourteenth week	2nd Law of Thermodynamics (2) Flipped learning
Fifteenth week	Final Exam
Sixteenth week	Lecture Feedback and Evaluation

[7] Assignments

The first assignment	assignment	Exercise and Problems of Chap. 1~6	submission date	2025-06-10 Tue
	purpose	To understand fundamental thermodynamics theory		
	procedure & notice	Submit the solution of the given problems.		
	references	Main text book		
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	SOIL MECHANICS	Course Number	EPD6072001
Major / School Year	Dept. of Safety Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 오태근	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-534:수(8B-9)] [ZZ-200:토(1-2A)]
Office hours			

[1] Outline / Purpose

In this course, students will learn what soils are, how they are derived, and how they are identified and classified for engineering purposes. The students will also learn the principles that govern flow of water in soils, settlement and heave of soils, and shear strength of soils as well as consolidation problems. This course provides how to calculate factors of safety for foundations and how to predict settlement of foundations. We will discuss actual field problems during the semester and I will show how the concepts that are taught in class can be applied to understand and solve real engineering problems.

[2] Course Learning Outcomes

The objectives of this course are:

- (1) to introduce the subject of geotechnical engineering (soil mechanics and foundation engineering) to students
- (2) to teach students how to solve certain fundamental problems related to consolidation, shear strength, and design of shallow foundations;
- (3) to familiarize students with relevant terms and soil tests so that they can work effectively with specialists in geotechnical engineering.

[3] Class Delivery Method

* 코로나19 상황이 진행되는 중에는 다음과 같은 방식으로 비대면 수업을 진행합니다.

- 수업 전 업로드된 강의자료를 통한 예습
- 수업시간 중 카카오톡 단톡방을 활용한 질의 응답 형태로 강의 진행
- * 수강변경신청을 통한 강의 수강 희망자는 제 메일이나 문자로 알려주세요.

e-mail: tkoh@inu.ac.kr /

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
90 %	%	%	%	%	10 %	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	%	50 %	%	%	%	%	10 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	B.M. Das	Publisher	PWS Publishing Co.	Textbook	Principles of Geotechnical Engineering	Issued year	1994
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	J.N. Cernica	Publisher	John Wiley and Sons, Inc.	Textbook	Geotechnical Engineering : Foundation Design	Issued year	1995
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	soil and rocks
Second week	soil composition
Third week	classification of soil
Fourth week	soil compaction
Fifth week	flow of water in soil: permeability and seepage
Sixth week	effective stress concepts
Seventh week	mid-term exam
Eighth week	stress in a soil mass
Ninth week	compressibility of soil
Tenth week	shear strengths of soil
Eleventh week	lateral earth pressure
Twelfth week	soil-bearing capacity for shallow foundation
Thirteenth week	slope stability
Fourteenth week	environmental geotechnology
Fifteenth week	subsoil exploration
Sixteenth week	final exam

[7] Assignments

The first assignment	assignment	solving problems in each chapter	submission date	
	purpose	understand the soil mechanics		
	procedure & notice	Each homework will be assigned in class once per week, on average.		
	references	main text book		
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	CONSTRUCTION MATERIALS	Course Number	EQB6065001
Major / School Year	Dept. of Safety Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 오태근	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-338:월(2B-3),수(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

To understand the basics of the physical, chemical and mechanical properties and practical issues related to the application and design of portland cement concrete, other construction materials. Another course objective is the development of effective engineering analysis and technical communication skills through written assignments, and student classroom discussion.

[2] Course Learning Outcomes

The lectures are divided into three topic areas: (i) material constituents, (ii) initial material properties and (iii) long-term material properties/ All three areas are presented in terms of both material science and practical engineering issues.

[3] Class Delivery Method

* 코로나19 상황이 진행되는 중에는 다음과 같은 방식으로 비대면 수업을 진행합니다.

- 수업 전 업로드된 강의자료를 통한 예습

- 수업시간 중 카카오톡 단톡방을 활용한 질의 응답 형태로 강의 진행

* 수강변경신청을 통한 강의 수강 희망자는 제 메일이나 문자로 알려주세요.

e-mail: tkoh@inu.ac.kr

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
90 %	%	%	%	10 %	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	%	80 %	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	S.Mindess, J.F. Young, D.Darwin	Publisher	Prentice Hall	Textbook	Concrete, 2nd ed.	Issued year	2003
(2)	Author	S.H.Kosmatka, B. Kerkhoff and W.C. Panarese	Publisher	Portland Cement Association	Textbook	Design and control of concrete mixtures, 14th ed	Issued year	2002
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction Concrete as a Material
Second week	Historical Development of Cement and Concrete Cement
Third week	Hydration of Portland Cement Mineral Admixtures and Blended Cements
Fourth week	Water Aggregates
Fifth week	Chemical Admixtures Fresh Concrete
Sixth week	Proportioning Concrete Mixes Concrete Construction Practices
Seventh week	Curing
Eighth week	Mid-exam
Ninth week	Responses of Concrete to Stress Testing of Hardened Concrete
Tenth week	Quality Control Time-Dependent Deformation
Eleventh week	Other Properties of Concrete Durability
Twelfth week	High-Strength Concrete
Thirteenth week	Concretes for Special Applications
Fourteenth week	Cement-Polymer Composites
Fifteenth week	Fiber Reinforced Concrete
Sixteenth week	Final-exam

[7] Assignments

The first assignment	assignment	solving the problems in each chapter	submission date	
	purpose	acquire the ability to do scientific analysis		
	procedure & notice	the written assignments are due at the beginning of lecture on the due date. Late assignments are penalized 10% for each day late. All written assignment must be clearly and legibly presented. Any numerical answers must include calculations and a description of the logic behind each step.		
	references	main textbook		
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	FIRE PREVENTION ENGINEERING	Course Number	EQB6013001
Major / School Year	Dept. of Safety Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 이민철	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-534:화(5B-6),수(1-2A)]
Office hours			

[1] Outline / Purpose

- This lecture provides fundamental engineering knowledge of fire protection as a basic tool of engineering and science to help protect people, property, and operations from fire and explosions.
- The primary goal of this lecture is to build up students' ability and to extend knowledge to be a fire protection engineering professional.

[2] Course Learning Outcomes

- To understand fundamental concept and theory of fire protection engineering which includes fire science, fire prevention, combustion characteristics, terminology, fire phenomena, fire countermeasure, fire extinguishing agent, and fire protection systems.
- To help student who prepares national qualification exam related to fire protection engineering.

[3] Class Delivery Method

- PPT presentations with visible and audible media are the primary tools for this lecture.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	5 %	0 %	0 %	0 %	0 %	0 %	15 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
5 %	0 %	0 %	0 %	0 %	0 %	90 %	5 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Lon H. Ferguson and Christopher A. Janicak	Publisher	Rowman & Littlefield Pub Inc	Textbook	Fundamentals of Fire Protection for the Safety Professional	Issued year	2015 0427
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	이해평 외	Publisher	동화기술	Textbook	최신방화공학	Issued year	2009 0705
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Lecture Outline, Introduction to Fire Protection Engineering
Second week	Basics of Fire Science
Third week	Combustion Characteristics
Fourth week	Combustion Related Terminology
Fifth week	Combustion Product
Sixth week	Fire Phenomena (1)
Seventh week	Fire Phenomena (2)
Eighth week	Midterm Exam (Midterm Exam can be substituted by home assignments)
Ninth week	Dangerous Substance (1)
Tenth week	Dangerous Substance (2)
Eleventh week	Fire Extinguishing Agent (1)
Twelfth week	Fire Extinguishing Agent (2)
Thirteenth week	Fire Protection System (1)
Fourteenth week	Fire Protection System (2)
Fifteenth week	Evacuation Plan
Sixteenth week	기말고사 및 강의평가

[7] Assignments

The first assignment	assignment	Investigation into the Korean Law of Fire Protection	submission date	2025-06-10 Tue
	purpose	To understand the Korean Law of Fire Protection		
	procedure & notice	Upload the report file by file format of DOC. or HWP.		
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Energy Safety Engineering	Course Number	0006739001
Major / School Year	Dept. of Safety Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 김태완	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-338:화(2B-3),목(2B-3)]
Office hours			

[1] Outline / Purpose

Energy transfer is a physical phenomenon applied in many industrial application. Especially, this gives a great impact to the progress and propagation of accidents. Thus, it is very important in the evaluation of system safety to understand the energy transfer and to analyze/evaluate system behaviors based on that. This course explains the energy transfer physically and discusses its applications for safety evaluation by using examples from many industrial systems.

[2] Course Learning Outcomes

- To understand the fundamentals of heat transfer
- To analyze the heat transfer in industrial applications and safety systems

[3] Class Delivery Method

Lecture-based Teaching

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Lecture Material	Issued year	
(2)	Author	F.P.Incropera, et al.	Publisher	Wiley	Textbook	Introduction to Heat Transfer	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	고한서 등 공역	Publisher	교보문고	Textbook	열전달	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Definitions and physical properties
Third week	Fundamental concepts of conduction
Fourth week	One-dimensional steady-state conduction
Fifth week	Transient conduction
Sixth week	Basics of fluid mechanics (I)
Seventh week	Basics of fluid mechanics (II)
Eighth week	Midterm Exam
Ninth week	Fundamental concepts of convection
Tenth week	External forced convection
Eleventh week	Internal forced convection
Twelfth week	Natural circulation
Thirteenth week	Boiling and condensation
Fourteenth week	Heat exchanger
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Construction Safety Relation Raw	Course Number	0006737001
Major / School Year	Dept. of Safety Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 오태근	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-338:화(7-8A),목(5B-6)]
Office hours			

[1] Outline / Purpose

This class is aimed at understanding the Occupational Safety and Health Law and KOSHA regulations and confirming how it is applied in the field.

[2] Course Learning Outcomes

Exploration of the KOSHA regulations and related safety practices governing the construction industry. Provides an analysis of the high incident/accident rates in the construction industry and how it contributed to the passage of the OSH Act. Presents practical examples of how to apply "on the job" construction safety and health programs and policies.

[3] Class Delivery Method

There will be three hour lectures a week. Student attendance is necessary to maximize the learning experience. Lectures will be used for presenting new concepts. Lecture notes will be available for download from the course's Web site. In addition, reading assignments from the course textbook will be given for each lecture. The learning will be aided with E-learning for this course.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	20 %	10 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	90 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Grades will be based on homework assignments given each class period and collected the following class meeting, two quiz and two exams given during the semester on the day specified in the course outline. Letter grades will be awarded on the basis of total scores:

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Goetsch, D. L.	Publisher	Prentice Hall	Textbook	Construction safety and the OSHA standards	Issued year	2010
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Occupational Safety and Health Standards for the Construction Industry
Third week	Occupational Safety and Health Standards for General Industry
Fourth week	Construction Industry Outreach Trainers
Fifth week	General Industry Outreach Trainers
Sixth week	Occupational Safety and Health Standards for the Construction Industry
Seventh week	Occupational Safety and Health Standards for General Industry
Eighth week	Midterm-exam
Ninth week	OSHA Guide to Industrial Hygiene
Tenth week	Hazardous Materials
Eleventh week	Machinery and Machine Guarding Standards
Twelfth week	Cranes in Construction
Thirteenth week	Respiratory Protection
Fourteenth week	Principles of Scaffolding
Fifteenth week	Fall Protection & Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	solving the problems in each chapter	submission date	2019-09-11 Wed
	purpose	acquire the ability to do the structural analysis		
	procedure & notice	Each homework will be assigned in class once per week, on average. Selected problems will be graded and full solutions provided the following week.		
	references	main text book		
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Disaster Risk Evaluation	Course Number	0006098001
Major / School Year	Dept. of Safety Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Safety Engineering / 김태완	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-338:월(5B-6),수(5B-6)]
Office hours			

[1] Outline / Purpose

The root cause of many large-scale disasters was the failure of man-made equipments/systems. This indicates that the disasters could be prevented if the risk factors were identified and warned. Thus it is obviously important to establish a system in which the risk factors are identified in advance and the person-in-charge gets alarmed for the identified risk factors. At first, this course explains the risk characteristics and the safety concepts of various industries. Then the characteristics of human behavior are introduced as one of the most important risk factors and the way to minimize the human-induced failure is discussed.

[2] Course Learning Outcomes

- To understand risk characteristics and safety concepts in various industries
- To understand the characteristics of human behavior
- to understand how to minimize the human-induced failure

[3] Class Delivery Method

Lecture-based course

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Lecture Materials	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Disasters by human being
Third week	Accident occurrence theory
Fourth week	Methods for safety improvement
Fifth week	Risk characteristics and safety concepts (I)
Sixth week	Risk characteristics and safety concepts (II)
Seventh week	Risk characteristics and safety concepts (III)
Eighth week	Midterm Exam
Ninth week	Characteristics and limitation of human being
Tenth week	Human Error
Eleventh week	Safety culture
Twelfth week	Risk estimation and priority
Thirteenth week	Risk decision
Fourteenth week	Risk assessment
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Fundamental Experiment for Energy and Chemical Engineering	Course Number	0001211001
Major / School Year	Dept. of Energy and Chemical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Energy and Chemical Engineering / 권오중	Grades/Lecture/ Practice	2 / 0 / 4
Phone Number		A weekday / class /	[08-543:수(6)(7)(8)(9)]
Office hours	Scheduling via e-mail	lecture room	

[1] Outline / Purpose

We will confirm the knowledge acquired by major subject through experiments and make sure the difference between theory and experiments. There will be also discussion to figure out the reason of the difference between theory and experiments. We will have four topics during the semester. Students should submit a preliminary report prior to experiments and an experiment report after experiment. It is recommended that the experiment report contains in-depth discussion.

[2] Course Learning Outcomes

1. Students could confirm the various theory by experiments.
2. Students could plan, proceed, and summarize the experiments.
3. Students could figure out the reason why the theory and experiment show different result.

[3] Class Delivery Method

There will be a brief introduction to the topic of every experiment and experimental manual is going to be handed out to the students after the introduction. Students should write a preliminary report based on the experimental manual and the introduction, and by doing so students could be accustomed to the experiment. After the experiment, experiment report should be submitted to professor. There will be a final presentation to test student's achievement at the end of semester.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
20 %	0 %	0 %	80 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	20 %	0 %	0 %	0 %	0 %	80 %

[4] Grading Policies

attendance: 20%
preliminary report: 25 %
experiment report: 35 %
presentation: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	printed material	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation and Introduction
Second week	Experiment 1. The measurement of dissociation constant of weak acid – theory
Third week	Experiment 1. The measurement of dissociation constant of weak acid – experiment
Fourth week	Experiment 1. The measurement of dissociation constant of weak acid report
Fifth week	Experiment 2. The adsorption of phenol on activated carbon – theory
Sixth week	Experiment 2. The adsorption of phenol on activated carbon – experiment
Seventh week	Experiment 2. The adsorption of phenol on activated carbon report
Eighth week	Experiment 3. The dependence of a reaction rate constant and reaction temperature – theory
Ninth week	Experiment 3. The dependence of a reaction rate constant and reaction temperature – experiment
Tenth week	Experiment 3. The dependence of a reaction rate constant and reaction temperature report
Eleventh week	Experiment 4. CV (Cyclic Voltammetry) Experiment – theory
Twelfth week	Experiment 4. CV (Cyclic Voltammetry) Experiment – experiment
Thirteenth week	Experiment 4. CV (Cyclic Voltammetry) Experiment report
Fourteenth week	Make-up Experiment
Fifteenth week	Presentation
Sixteenth week	

[7] Assignments

The first assignment	assignment	Preliminary report 1 ~ 4	submission date	
	purpose			
	procedure & notice			
	references	Experiment report 1 ~ 4		
The second assignment	assignment	Experiment report 1 ~ 4	submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Fundamental Experiment for Energy and Chemical Engineering	Course Number	0001211002
Major / School Year	Dept. of Energy and Chemical Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Energy and Chemical Engineering / 노윤호	Grades/Lecture/ Practice	2 / 0 / 4
Phone Number		A weekday / class / lecture room	[08-543:월(6)(7)(8)(9)]
Office hours			

[1] Outline / Purpose

We will reinforce the knowledge acquired in major subjects through experiments and examine the differences between theoretical concepts and experimental results. Discussions will be held to analyze the reasons for these differences. The course will cover six topics throughout the semester. Students are required to submit a preliminary report before each experiment and a final report afterward. The experiment report should include an in-depth discussion of the results.

[2] Course Learning Outcomes

1. Students will be able to verify various theories through experiments.
2. Students will be able to design, conduct, and summarize experiments.
3. Students will be able to analyze the reasons for discrepancies between theoretical predictions and experimental results.

[3] Class Delivery Method

Each experiment will begin with a brief introduction to the topic, followed by the distribution of an experimental manual to students. Based on the introduction and manual, students are required to write a preliminary report, which will help them familiarize themselves with the experiment. After completing the experiment, students must submit an experiment report to the professor. At the end of the semester, a final presentation will be conducted to assess students' achievements.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation and Introduction
Second week	Experiment 1. The measurement of weak acid–dissociation constant – theory
Third week	Experiment 1. The measurement of weak acid–dissociation constant – experiment
Fourth week	Experiment 1. The measurement of weak acid–dissociation constant – report
Fifth week	Experiment 2. The adsorption of phenol on activated carbon – theory
Sixth week	Experiment 2. The adsorption of phenol on activated carbon – experiment
Seventh week	Experiment 2. The adsorption of phenol on activated carbon – report
Eighth week	Experiment 3. The dependence of a reaction rate constant and reaction temperature – theory
Ninth week	Experiment 3. The dependence of a reaction rate constant and reaction temperature – experiment
Tenth week	Experiment 3. The dependence of a reaction rate constant and reaction temperature – report
Eleventh week	Experiment 4. CV (Cyclic Voltammetry) Experiment – theory
Twelfth week	Experiment 4. CV (Cyclic Voltammetry) Experiment – experiment
Thirteenth week	Experiment 4. CV (Cyclic Voltammetry) Experiment – report
Fourteenth week	Make-up experiment
Fifteenth week	Presentation
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Experiment for Energy Conversion and Storage	Course Number	0001224001
Major / School Year	Dept. of Energy and Chemical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Energy and Chemical Engineering / 이창연	Grades/Lecture/Practice	2 / 0 / 4
Phone Number		A weekday / class / lecture room	[08-530:목(6)(7)(8)(9)]
Office hours			

[1] Outline / Purpose

Introduction to experimental problems encountered in the synthesis, isolation, purification, characterization, and identification of organic-inorganic hybrid material such as metal-organic frameworks.

[2] Course Learning Outcomes

- This course is designed to introduce the student to basic techniques and procedures in isolation, purification, and characterization of organic and inorganic compounds.
- Metal-organic frameworks materials (ZIF-67 and UiO-66) will be synthesized and studied by an analytical technique.
- Student will be trained in the proper way to write a scientific laboratory report.

[3] Class Delivery Method

Short lecture and experiment

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	%	%	70 %	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation and Synthesis of UiO-66
Second week	Characterization of UiO-66 (SEM), Submission of preliminary report
Third week	Characterization of UiO-66 (BET, XRD)
Fourth week	Synthesis of ZIF-8
Fifth week	Characterization of ZIF-8 (SEM)
Sixth week	Characterization of ZIF-8 (BET, XRD)
Seventh week	BET Theory
Eighth week	Preparation of final report
Ninth week	Orientation
Tenth week	Theoretical background for fuel cell
Eleventh week	Assembly of fuel cell – Submission of preliminary report
Twelfth week	Assembly of fuel cell
Thirteenth week	Test of the fuel cell: getting I/V curve
Fourteenth week	Test of the fuel cell: getting I/V curve
Fifteenth week	Presentation – Submission of result report
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Experiment for Energy Conversion and Storage	Course Number	0001224002
Major / School Year	Dept. of Energy and Chemical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Energy and Chemical Engineering / 윤정식	Grades/Lecture/ Practice	2 / 0 / 4
Phone Number		A weekday / class / lecture room	[08-572:목(6)(7)(8)(9)]
Office hours			

[1] Outline / Purpose

Experiments for Energy conversion & storage system is a one-semester college course. You'll begin with an exploration of the synthesis of inorganic materials of $\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$ (NCM) for Li-ion battery system and the fabrication of the cell system by using a coin-cell. You will have experiences of handling the electrochemical cells. After the midterm, introduction to experimental problems encountered in the synthesis, isolation, purification, characterization, and identification of organic-inorganic hybrid material such as metal-organic frameworks.

[2] Course Learning Outcomes

- This course is designed to introduce the student to basic techniques and procedures in isolation, purification, and characterization of organic and inorganic compounds.
- Students will learn the secondary battery fabrication method with data analysis
- Metal-organic frameworks materials (ZIF-67 and UiO-66) will be synthesized and studied by an analytical technique.
- Students will be trained in the proper way to write a scientific laboratory report.

[3] Class Delivery Method

- Lecture will undergo with lecture, experiment and report.
- All students will participate the lecture as a team comprising 3 or 4 students.
- At the initial period of the class, the lecture will be given to show and explain the background for the class.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
20 %	0 %	0 %	80 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	80 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation-1
Second week	Background
Third week	Synthesis of LiMn ₂ O ₄
Fourth week	Synthesis of LiMn ₂ O ₄
Fifth week	Fabrication of cathode and anode
Sixth week	Fabrication of the cell
Seventh week	Data analyses
Eighth week	Report
Ninth week	Orientation and Synthesis of UiO-66
Tenth week	Characterization of UiO-66 (SEM), Submission of preliminary report
Eleventh week	Characterization of UiO-66 (BET, XRD)
Twelfth week	Characterization of ZIF-8 (SEM)
Thirteenth week	Characterization of ZIF-8 (BET, XRD)
Fourteenth week	BET Theory
Fifteenth week	Preparation of final report
Sixteenth week	Report

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Catalysis	Course Number	0001230001
Major / School Year	Dept. of Energy and Chemical Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Energy and Chemical Engineering / 박민범	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-535:월(5B-6)] [09-225:수(5B-6)]
Office hours			

[1] Outline / Purpose

촉매 현상에 대한 종합적 이해로서 1, 2, 3학년에서 배운 일반화학, 물리화학, 열역학, 반응공학 등의 내용들에 대한 종합적인 적용이 이루어지도록 한다.

[2] Course Learning Outcomes

1. 촉매의 개념을 열역학, 속도론적 측면에서 살펴보고, 합성, 특성분석, 응용에 대해 공부한다.
2. 석유화학, 정제, 정밀화학, 에너지, 환경 관련의 촉매 화학공정에 대해 알아본다.

[3] Class Delivery Method

수업은 강의 위주로 이루어지며 과제와 중간 및 기말 시험을 통해 수업의 이해 정도와 학업 성취도를 평가한다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	%	70 %	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	서근, 김건중	Publisher	청문각	Textbook	촉매: 기본개념, 구조, 기능	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher	전남대학교 출판부	Textbook	촉매첫걸음	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	촉매 개론
Second week	촉매와 이동현상
Third week	흡착현상의 이해
Fourth week	흡착현상의 이해
Fifth week	촉매 반응 속도론
Sixth week	촉매 반응 속도론
Seventh week	촉매 반응 속도론
Eighth week	중간고사
Ninth week	촉매 합성의 이해
Tenth week	촉매 합성의 이해
Eleventh week	촉매 특성분석의 이해
Twelfth week	촉매 특성분석의 이해
Thirteenth week	촉매 특성분석의 이해
Fourteenth week	촉매의 에너지 환경 응용
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	CALCULUS(1)	Course Number	XAA1358029
Major / School Year	/ 1	completion division /Grade evaluation	/
Department/Professor	/ 우현명	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-539:월(5B-6),목(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

This course is an introductory course for calculus. Calculus is an essential mathematical technique to model, analysis, and design various engineering problems. This course will cover derivatives, integrals, and their applications in diverse engineering problems.

[2] Course Learning Outcomes

1. Understand basic theories for calculus.
2. Understand basic and essential techniques for derivatives and integrals.
3. Able to apply calculus to model and solve engineering problems.

[3] Class Delivery Method

This course will use lecture slides and a blackboard for solving equations. Lecture slides will be provided via e-learning.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm: 30%

Final: 40%

HW & Quiz: 10%

Attendance: 20 %

① Percentage of grade evaluation

Exam	Attendance	Assignment
70 %	20 %	10 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	James Stewart	Publisher	Cengage	Textbook	Calculus – Metric Version 9E	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction – Functions and limits – Suggested reading: Ch. 1
Second week	Functions and Limits – Limit of a function – Continuity – Suggested reading: Ch. 1
Third week	Derivatives – Derivatives and rates of change – Derivatives as a function – Differentiation formulas – Suggested reading: Ch. 2
Fourth week	Derivatives – Derivatives of trigonometric functions – Chain rule – Suggested reading: Ch. 2 – HW #1
Fifth week	Application of Derivatives – Maximum and minimum values – Mean value theorem – Suggested reading: Ch. 3
Sixth week	Integrals – Area and distance problems – Definite integral – Suggested reading: Ch. 4 – HW #2
Seventh week	Integrals – Fundamental theorem of calculus – indefinite integral and the net change theorem – The substitution rule – Review for the midterm – Suggested reading: Ch. 4
Eighth week	Midterm exam
Ninth week	Application of integration – Area between curves – Volumes – Work – Suggested reading: Ch. 5
Tenth week	Inverse functions – Inverse functions and their derivatives – Exponential, logarithmic functions – Suggested reading: Ch. 6
Eleventh week	Inverse functions – Inverse trigonometric functions – Hyperbolic function – Suggested reading: Ch. 6 – HW #3
Twelfth week	Techniques of integration – Integration by parts – Trigonometric integrals – Trigonometric substitution – Suggested reading: Ch. 7
Thirteenth week	Techniques of integration – Integration of rational functions by partial fractions – Strategy for integration – Integration using tables and technology – Suggested reading: Ch. 7 – HW #4
Fourteenth week	Further applications of integration – Applications to physics and engineering – Review for the final – Suggested reading: Ch. 8
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission	

The second assignment			date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Engineering Programming with MATLAB	Course Number	0008730001
Major / School Year	/ 1	completion division /Grade evaluation	/
Department/Professor	/ 김우용	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[27-105:월(7)(8)(9)]
Office hours			

[1] Outline / Purpose

This course introduces MATLAB and its applications to the engineering fields.

MATLAB is one of the essential tools for engineers that effectively calculate complex equations or matrix operations to derive solutions to engineering problems.

The main purpose of this course is to learn the basic use of MATLAB and solve various engineering problems through the various functions of MATLAB.

[2] Course Learning Outcomes

- 1) Understand and apply fundamental programming concepts using MATLAB.
- 2) Design and implement algorithms for solving real-world engineering problems using MATLAB.
- 3) Create clear and compelling visualizations of engineering data using MATLAB.

[3] Class Delivery Method

This course is a problem-based lecture. Lectures are interactive and include problem-based MATLAB assignments.

- 1) Introduction to the engineering problem to be solved
- 2) Practice the relevant MATLAB functions through sub-problems
- 3) Solve and discuss the given problem through MATLAB

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	0 %	20 %	0 %	0 %	0 %	50 %	0 %

[4] Grading Policies

Midterm: 30 %

Final: 30 %

Weekly problem: 20 %

Attendance: 20 %

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	WILLIAM J. PALM III	Publisher	McGraw Hill	Textbook	MATLAB for Engineering Applications, 4th edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course overview and a brief introduction to MATLAB workspace
Second week	Basic operators, commands, and built-in functions
Third week	Numeric arrays and plotting
Fourth week	Matrix operations
Fifth week	MATLAB script, and user-defined functions
Sixth week	MATLAB Programming (1) Handling logical expressions: "If" statement
Seventh week	MATLAB Programming (2) Handling logical expressions: "If" statement
Eighth week	Midterm exam
Ninth week	MATLAB Programming (3) Handling repetitive tasks: "For" loop
Tenth week	MATLAB Programming (4) Handling repetitive tasks: "while" loop
Eleventh week	Advanced plotting and Regression
Twelfth week	Engineering applications: Statics and Interpolation
Thirteenth week	Engineering applications: Linear algebra
Fourteenth week	Engineering applications: Numerical method for Calculus
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Engineering Programming with MATLAB	Course Number	0008730003
Major / School Year	/ 1	completion division /Grade evaluation	/
Department/Professor	/ 김우용	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[27-105:금(5)(6)(7)]
Office hours			

[1] Outline / Purpose

This course introduces MATLAB and its applications to the engineering fields.

MATLAB is one of the essential tools for engineers that effectively calculate complex equations or matrix operations to derive solutions to engineering problems.

The main purpose of this course is to learn the basic use of MATLAB and solve various engineering problems through the various functions of MATLAB.

[2] Course Learning Outcomes

- 1) Understand and apply fundamental programming concepts using MATLAB.
- 2) Design and implement algorithms for solving real-world engineering problems using MATLAB.
- 3) Create clear and compelling visualizations of engineering data using MATLAB.

[3] Class Delivery Method

This course is a problem-based lecture. Lectures are interactive and include problem-based MATLAB assignments.

- 1) Introduction to the engineering problem to be solved
- 2) Practice the relevant MATLAB functions through sub-problems
- 3) Solve and discuss the given problem through MATLAB

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	0 %	20 %	0 %	0 %	0 %	50 %	0 %

[4] Grading Policies

Midterm: 30 %

Final: 30 %

Weekly problem: 20 %

Attendance: 20 %

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	WILLIAM J. PALM III	Publisher	McGraw Hill	Textbook	MATLAB for Engineering Applications, 4th edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course overview and a brief introduction to MATLAB workspace
Second week	Basic operators, commands, and built-in functions
Third week	Numeric arrays and plotting
Fourth week	Matrix operations
Fifth week	MATLAB script, and user-defined functions
Sixth week	MATLAB Programming (1) Handling logical expressions: "If" statement
Seventh week	MATLAB Programming (2) Handling logical expressions: "If" statement
Eighth week	Midterm exam
Ninth week	MATLAB Programming (3) Handling repetitive tasks: "For" loop
Tenth week	MATLAB Programming (4) Handling repetitive tasks: "while" loop
Eleventh week	Advanced plotting and Regression
Twelfth week	Engineering applications: Statics and Interpolation
Thirteenth week	Engineering applications: Linear algebra
Fourteenth week	Engineering applications: Numerical method for Calculus
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Engineering Programming with MATLAB	Course Number	0008730002
Major / School Year	/ 1	completion division /Grade evaluation	/
Department/Professor	/ 김우용	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[27-105:수(5)(6)(7)]
Office hours			

[1] Outline / Purpose

This course introduces MATLAB and its applications to the engineering fields.

MATLAB is one of the essential tools for engineers that effectively calculate complex equations or matrix operations to derive solutions to engineering problems.

The main purpose of this course is to learn the basic use of MATLAB and solve various engineering problems through the various functions of MATLAB.

[2] Course Learning Outcomes

- 1) Understand and apply fundamental programming concepts using MATLAB.
- 2) Design and implement algorithms for solving real-world engineering problems using MATLAB.
- 3) Create clear and compelling visualizations of engineering data using MATLAB.

[3] Class Delivery Method

This course is a problem-based lecture. Lectures are interactive and include problem-based MATLAB assignments.

- 1) Introduction to the engineering problem to be solved
- 2) Practice the relevant MATLAB functions through sub-problems
- 3) Solve and discuss the given problem through MATLAB

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	0 %	20 %	0 %	0 %	0 %	50 %	0 %

[4] Grading Policies

Midterm: 30 %

Final: 30 %

Weekly problem: 20 %

Attendance: 20 %

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	WILLIAM J. PALM III	Publisher	McGraw Hill	Textbook	MATLAB for Engineering Applications, 4th edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course overview and a brief introduction to MATLAB workspace
Second week	Basic operators, commands, and built-in functions
Third week	Numeric arrays and plotting
Fourth week	Matrix operations
Fifth week	MATLAB script, and user-defined functions
Sixth week	MATLAB Programming (1) Handling logical expressions: "If" statement
Seventh week	MATLAB Programming (2) Handling logical expressions: "If" statement
Eighth week	Midterm exam
Ninth week	MATLAB Programming (3) Handling repetitive tasks: "For" loop
Tenth week	MATLAB Programming (4) Handling repetitive tasks: "while" loop
Eleventh week	Advanced plotting and Regression
Twelfth week	Engineering applications: Statics and Interpolation
Thirteenth week	Engineering applications: Linear algebra
Fourteenth week	Engineering applications: Numerical method for Calculus
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Statics	Course Number	0008309001
Major / School Year	/ 1	completion division / Grade evaluation	/
Department/Professor	/ 박기원	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-539:수(8)(9)] [ZZ-200:토(2)]
Office hours			

[1] Outline / Purpose

- Problem-solving techniques applicable to engineering science courses.
- Methods to establish or enforce static equilibrium in particles and rigid bodies.
- Centroids, centers of mass, and mass moments of inertia
- The mechanics of dry friction

[2] Course Learning Outcomes

- Components of a force and the resultant force
- Moment caused by a force acting on a rigid body
- Force and moment reactions at the supports and connections of a rigid body
- Centroid and center of gravity for an area and a rigid body
- Moment of inertia and radius of gyration of a composite area

[3] Class Delivery Method

- Text and slides
- Deliver the information with lectures
- Flipped learning

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	20 %	0 %	30 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	R.C. Hibbeler	Publisher	Pearson	Textbook	Mechanics for Engineers: Statics	Issued year	2013
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Chap. 1. Introduction to Mechanics: Fundamental Principles and Newtons Laws (E-Learning)
Second week	Chap 2. Force vectors (E-Learning)
Third week	Chap 2. Force vectors
Fourth week	Chap.3. Equilibrium of a particle
Fifth week	Chap.3. Equilibrium of a particle
Sixth week	Chap. 4. Force System Resultants
Seventh week	Chap. 4. Force System Resultants
Eighth week	Midterm
Ninth week	Chap. 5. Equilibrium of a rigid body
Tenth week	Chap. 5. Equilibrium of a rigid body
Eleventh week	Chap. 5. Equilibrium of a rigid body
Twelfth week	Chap. 6. Structural Analysis
Thirteenth week	Chap. 6. Structural Analysis
Fourteenth week	Chap. 6. Structural Analysis
Fifteenth week	Internal forces, Friction, Center of gravity and centroid
Sixteenth week	Final exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ADVANCED ENGINEERING MATHEMATICS(2)	Course Number	EBA6003001
Major / School Year	/ 2	completion division / Grade evaluation	/
Department/Professor	/ 윤종윤	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-539:월(7-8A),금(5B-6)]
Office hours			

[1] Outline / Purpose

This course (Advanced Engineering Mathematics II) will cover the basic concepts of Fourier series and PDE(Partial Differential Equation). In order to achieve the main goals of this course work, the student have to know the fundamental concepts from the previous course (Advanced Engineering Mathematics I). After the end of 1st semester, the student will acquire the basic concepts of Fourier series and partial differential equations and know the various methods to figure out multiple types of mathematical formulations.

[2] Course Learning Outcomes

1. Understand the method of finding out the Fourier coefficients
2. Know the fundamental concepts of the Fourier analysis
2. Know how to solve the given differential equations with the two variables
3. Undertand the procedures to solve the partial differential equations

[3] Class Delivery Method

Lecture using PPT files and showing the relevant examples and problems based on the on-line (cyber.inu.ac.kr) through the whole period of semester

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	%	%	%	20 %	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	%	50 %	%	%	%	%	%

[4] Grading Policies

1. Understand the Fourier analysis and know the method to find out the Fourier coefficients
2. Construct the mathematical formulations with partial differential equations
3. Understand multiple methods to solve the various types of partial differential equations

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Erwin Kreyszig	Publisher	Wiley	Textbook	Advanced Engineering Mathematics, 10th edition	Issued year	2011 0101
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Fourier Analysis 11.1. Fourier Series : Relevant out source will be announced at cyber.inu.ac.kr
Second week	Fourier Analysis 11.2. Arbitrary Period : Relevant out source will be announced at cyber.inu.ac.kr
Third week	Fourier Analysis 11.2. Arbitrary Period. Even and Odd Functions
Fourth week	Fourier Analysis 11.2. Even and Odd Functions/Half-Range Expansions
Fifth week	Fourier Analysis 11.3. Forced Oscillations 11.4. Approximation by Trigonometric Polynomials
Sixth week	Fourier Analysis 11.4. Approximation by Trigonometric Polynomials 11.7. Fourier Integral
Seventh week	Fourier Analysis 11.7. Fourier Integral 11.8. Fourier Cosine and Sine Transforms
Eighth week	Fourier Analysis 11.8. Fourier Cosine and Sine Transforms 11.9. Fourier Transform
Ninth week	Fourier Analysis 11.8. Fourier Cosine and Sine Transforms 11.9. Fourier Transform
Tenth week	Partial Differential Equations (PDEs) 12.1. Basic Concepts of PDEs 12.2. Modeling: Vibrating String, Wave Equation
Eleventh week	Partial Differential Equations (PDEs) 12.3. Solution by Separating Variables – Use of Fourier Series
Twelfth week	Partial Differential Equations (PDEs) 12.4. D'Alembert's Solution of the Wave Equation. Characteristics
Thirteenth week	Partial Differential Equations (PDEs) 12.5. Modeling: Heat Flow from a Body in Space Heat Equation 12.6. Heat Equation: Solution by Fourier Series.
Fourteenth week	Partial Differential Equations (PDEs) 12.5. Modeling: Heat Flow from a Body in Space Heat Equation 12.6. Heat Equation: Solution by Fourier Series.
Fifteenth week	Partial Differential Equations (PDEs) 12.8. Modeling: Membrane Two-Dimensional Wave Equation 12.9. Rectangular Membrane. Double Fourier Series
Sixteenth week	Partial Differential Equations (PDEs) 12.8. Modeling: Membrane Two-Dimensional Wave Equation 12.9. Rectangular Membrane. Double Fourier Series

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	
	purpose			

The second assignment				
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MECHANICS OF MATERIALS	Course Number	EPD6089001
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/ 한유성	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-539:목(5)(6)] [ZZ-200:월(3)]
Office hours		lecture room	

[1] Outline / Purpose

The course explores fundamental principles of solid mechanics; displacement and strain measures, introduction to statics of solid bodies, equilibrium equations. Topics include structural analysis of columns, beams and shafts subject to the various types of loading

[2] Course Learning Outcomes

On successful completion of this course, a student will be able to (1) understand the concepts of stress, strain, and mechanical failure, and (2) apply the principles of equilibrium, constitutive laws, and compatibility of deformation for structural analysis.

[3] Class Delivery Method

The course will be delivered by blackboard and powerpoint presentations. Lecture notes will be given to students in advance. It is highly recommended that students read lecture notes and teaching materials ahead to be ready for the lectures. Important announcements will be posted on the class website. Students are encouraged to keep check it not to miss any announcements.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Stephen H.Crandall, Norman C Dahl, Thomas J. Lardner, and Dr. M S Sivakumar	Publisher	McGraw Hill	Textbook	An Introduction to Mechanics of Solids (In SI Units) 3rd Edition (ISBN: 9781259072000)	Issued year	
(2)	Author	JAMES M. GERE, BARRY J. GOODNO	Publisher	CL Engineering	Textbook	MECHANICS OF MATERIALS, 9th Edition (ISBN: 9781111136024)	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation: Course overview, evaluation, etc Fundamental principles of mechanics I
Second week	Mechanics of deformable bodies Castiglianos theorem
Third week	Singularity function
Fourth week	Stress and equilibrium equations
Fifth week	Stress and equilibrium equations
Sixth week	Mohrs circle for plane stress Deformation and Strain
Seventh week	tensile test and material behaviors
Eighth week	Castiglianos theorem for uniaxial loading problems Midterm Exam
Ninth week	Stress-strain-temperature relations
Tenth week	Torsion
Eleventh week	Torsion
Twelfth week	Stress due to bending
Thirteenth week	Stress due to bending
Fourteenth week	Deflection due to Bending
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Electric Circuit	Course Number	0011913001
Major / School Year	/ 2	completion division / Grade evaluation	/
Department/Professor	/ 조영욱	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-539:월(8B-9),금(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

전기회로는 전기전자 분야에서 중요한 기본 지식을 제공하는 과정으로, 우리가 대체적으로 알고 있는 회로의 작동 원리와 해석 방법을 이해하는 데 초점을 맞춥니다. 이 수업은 전기 회로의 구성 요소인 저항, 전압원, 전류원, 커패시터, 인덕터 등의 기본적인 전자 회로소자들을 다루며, 이를 통해 회로의 동작과 해석 기술을 익힐 수 있습니다. 또한, 다양한 회로 분석 기법을 통해 복잡한 전기회로를 체계적으로 분석하고 문제를 해결할 수 있는 능력을 배양하는 것을 목표로 합니다.

[2] Course Learning Outcomes

이 수업을 통해 학생들은 다음과 같은 목표를 달성할 수 있습니다:

1. 전기회로의 기본 법칙과 이론 이해
옴의 법칙, 키르히호프의 전압법칙(KVL), 키르히호프의 전류법칙(KCL) 등 기본적인 전기회로 법칙을 이해하고 적용할 수 있습니다. 회로 분석 기법 습득
2. 직류(DC) 및 교류(AC) 회로에서의 전압, 전류, 저항 등의 값을 계산할 수 있는 능력을 갖춥니다.
병렬, 직렬 회로의 분석 방법을 이해하고 실습을 통해 회로를 해석할 수 있습니다.
복잡한 회로의 해석을 위해 스타-델타 변환, 전압 분배법, 전류 분배법 등 다양한 분석 기법을 익힙니다.
3. 실험과 해석 능력 배양
실험을 통해 이론적 분석과 실제 회로 동작 간의 차이를 이해하고, 이를 바탕으로 회로 설계 및 실험에서 발생할 수 있는 오류를 발견하고 해결할 수 있습니다.
4. 전기회로 설계 능력 향상
전기회로의 설계 과정에서 필요한 기본 원칙들을 적용하여 간단한 전기회로를 설계할 수 있습니다.
실험적인 분석 및 설계를 통해 회로의 성능을 평가하고 개선할 수 있는 능력을 기릅니다.
5. 수학적 사고와 문제 해결 능력 향상
수학적 방법을 활용하여 회로의 해석 및 문제 해결 능력을 배양합니다. (예: 미분방정식, 복소수, 행렬 등)

[3] Class Delivery Method

PPT 자료 제공을 통한 이론 학습 및 대단원 종료 별 문제 풀이 시간을 가집니다. 이론이 아무리 학습이 돼 있어도, 이것 어떻게 응용하고 해석할 수 있는지는 예시 문제풀이등을 통해서 함께 이해하는 시간을 가져보고자 합니다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	James W. Nilson	Publisher	Pearson	Textbook	Electrical Circuits (12th edition)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook	PPT 강의	Issued year	
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	과목소개 및 회로 해석 개요 Basic Components and Electric Circuits
Second week	Voltage and Current Laws -Kirchhoff's Current and Voltage Law -The Single-Loop Circuit
Third week	Voltage and Current Laws -The Single-Node Pair Circuit -Series and Parallel Connected Source -Resistors in Series and Parallel
Fourth week	Basic Nodal and Mesh Analysis
Fifth week	Handy Circuit Analysis Techniques -Linearity and Superposition -Source Transformations
Sixth week	Handy Circuit Analysis Techniques -Thevenin and Norton Equivalent circuit -Maximum Power Transfer
Seventh week	Useful Circuit Analysis Techniques -Thevenin and Norton Equivalent Circuits -Maximum Power Transfer
Eighth week	중간고사
Ninth week	Operational Amplifier
Tenth week	Basic RL and RC Circuit -Properties of the Exponential Response -Source-Free RC Circuit -A More General Perspective
Eleventh week	Basic RL and RC Circuit -The Unit Step Function -Driven RC Circuit
Twelfth week	The RLC Circuit -The Source-Free Parallel Circuit -The Source-Free Series RLC Circuit -Complete Response of the RLC Circuit
Thirteenth week	Sinusoidal Steady-State Analysis -The Complex Forcing Function -The Phasor
Fourteenth week	Sinusoidal Steady-State Analysis -Impedance and Admittance -Superposition, Source Transformations and Thevenin's theorem
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The third assignment	purpose	
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Robot dynamics and Controls	Course Number	0011914001
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/ 박기원	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[09-224:화(7-8A),수(2B-3)]
Office hours			

[1] Outline / Purpose

Kinematics of absolute and relative motion of particles and rigid bodies. Kinetics of particles and particle systems. Principles of work and energy, impulse and momentum, and impact. Kinetics of rigid bodies in plane motion.

[2] Course Learning Outcomes

1. Describe and analyze the motion of a point mass
2. Develop and solve the equations of motion for a particle
3. Determine the kinetic and potential energy of a particle and use these to determine the motion
4. Find the momentum and impulse of a particle and describe the relation between them
5. Describe the planar kinematics of rigid bodies
6. Develop and solve the equations of motion for a 2D and 3D rigid body
7. Determine the kinetic energy and momentum for a rigid body in planar motion

[3] Class Delivery Method

1. Text and slides
2. Deliver the information with lectures

④ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

⑤ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

④ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Planar Kinematics of a rigid body
Second week	Planar Kinematics of a rigid body
Third week	Planar Kinetics of a rigid body
Fourth week	Planar Kinetics of a rigid body
Fifth week	Planar Kinetics of a rigid body
Sixth week	Planar Kinetics of a rigid body: Work and Energy
Seventh week	Planar Kinetics of a rigid body: Conservation of energy
Eighth week	Midterm
Ninth week	Moving reference frame kinematics: 2D
Tenth week	Moving reference frame kinematics: 3D
Eleventh week	Planar kinetics of a rigid body
Twelfth week	3D kinematics of a rigid body
Thirteenth week	3D kinematics of a rigid body
Fourteenth week	Review for the final exam
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Cell Biotechnology1	Course Number	0010443001
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/ 차재민	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[09-224:월(5B-6),화(8B-9)]
Office hours		lecture room	

[1] Outline / Purpose

4차 산업혁명 시대를 맞아 전 세계적으로 바이오 분야가 시대를 이끄는 핵심 분야로 떠오르고 있는 가운데, 우리나라에서도 바이오 관련 산업을 3대 신산업으로 선정하고 집중 육성하고 있다. 현대의 바이오 산업 분야에 산재하고 있는 많은 문제들이 다양한 엔지니어링 기술의 지원을 받아 해결되고 있으며, 이미 바이오 분야에서 융합 전공의 엔지니어들이 의료현장의 많은 임상 연구자, 진료 전문 의사와 함께 의료 기술 발전에 큰 주축을 형성하고 있고 다양한 각도로 연구 협력을 진행하고 있으며, 이에 관련하여 수 많은 일자리가 창출되어 융합 전공 전문가 육성이 그 어느 때 보다 강조되고 있다.

본 세포생명공학1 과목은 공학도들의 바이오 분야에 대한 이해를 돕고 생명공학적 해석 능력을 함양하기 위해, 생명체의 기본단위인 세포의 기능 및 작용들을 포괄적으로 다룬다. 공학도의 관점에서 세포의 개념과 세포의 생명현상의 중심인 단백질을 이해하고, 이를 통해 세포의 다양한 거동을 학습한다.

[2] Course Learning Outcomes

- 공학을 전공하고 있는 엔지니어로서 전공적 시야를 넓히고 기존의 엔지니어링 틀을 넘어 다양한 관점에서 문제를 바라보고 창의적인 해결책을 찾을 수 있는 problem solver 인재 양성
- 향후 바이오메디컬 분야로의 진출을 희망하는 공학도를 위한 기초 전공지식 전달
- 공학도로서 바이오 산업 분야에서 업무를 수행하기 위해 기본적으로 필요한 세포 생물학 기초 학문 소양 함양

[3] Class Delivery Method

- 강의는 교재를 중심으로 슬라이드/판서를 겸하여 진행
- 온라인 강의는 동영상 및 실시간 화상 강의로 진행
- 모든 강의는 알기 쉬운 원어로 진행

④ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
90 %	0 %	0 %	10 %	0 %	0 %	0 %	0 %

⑤ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	0 %	70 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

④ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Bruce Alberts, Dennis Bray, Karen Hopkin, et. al.	Publisher	W.W. Norton & Company	Textbook	International Student Edition, Essential Cell Biology (5th)	Issued year	2019
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	– Introduction – Cells: The Fundamental Units of Life (1)
Second week	– Cells: The Fundamental Units of Life (2) – Cells: The Fundamental Units of Life (3)
Third week	– Cells: The Fundamental Units of Life (4) – Cells: The Fundamental Units of Life (5)
Fourth week	– Chemical Components of Cells (1) – Chemical Components of Cells (2)
Fifth week	– Chemical Components of Cells (3) – Chemical Components of Cells (4)
Sixth week	– Chemical Components of Cells (5) – Chemical Components of Cells (6)
Seventh week	– Energy, Catalysis, and Biosynthesis (1) – Energy, Catalysis, and Biosynthesis (2)
Eighth week	– Midterm Exam
Ninth week	– Energy, Catalysis, and Biosynthesis (3) – Energy, Catalysis, and Biosynthesis (4)
Tenth week	– Energy, Catalysis, and Biosynthesis (5) – Energy, Catalysis, and Biosynthesis (6)
Eleventh week	– Protein Structures and Function (1) – Protein Structures and Function (2)
Twelfth week	– Protein Structures and Function (3) – Protein Structures and Function (4)
Thirteenth week	– Protein Structures and Function (5) – Protein Structures and Function (6)
Fourteenth week	– Protein Structures and Function (7) – Protein Structures and Function (8)
Fifteenth week	– Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	THERMODYNAMICS	Course Number	EPA6048001
Major / School Year	/ 2	completion division / Grade evaluation	/
Department/Professor	/ 차재민	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-539:화(5B-6),수(5B-6)]
Office hours			

[1] Outline / Purpose

본 과목은 공학도로서의 필수 소양인 열역학의 기본 개념에 대한 이해를 돕는다. 일과 열 및 에너지의 정의와 밀폐시스템의 열역학 1법칙 그리고 열역학적 물성치에 대해 배운다. 이어 개방 시스템의 열역학 1법칙 및 이용방법과 열역학 2법칙 및 엔트로피 그리고 이들을 시스템 해석에 응용하는 방법을 학습한다.

[2] Course Learning Outcomes

- 공학도로서 필수 소양인 열역학의 기본 개념을 이해
- 열역학 법칙들의 심도 깊은 이해 및 다양한 물리 현상 적용 능력 함양
- 에너지 개념 확립 및 물질의 열역학적 성질 변화에 따른 현상 이해

[3] Class Delivery Method

- 교재를 중심으로 슬라이드/판서를 겸하여 진행
- 모든 강의는 알기 쉬운 원어로 진행

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Yunus A. Cengel, Michael A Boles	Publisher	McGraw-Hill Education	Textbook	Thermodynamics: An Engineering Approach, 8th Edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	- 열역학의 기본개념 (1) - 열역학의 기본개념 (2)
Second week	- 열역학의 기본개념 (3): 열역학 제0법칙 - 에너지 전달 및 해석 (1)
Third week	- 에너지 전달 및 해석 (2) - 에너지 전달 및 해석 (3): 열역학 제1법칙
Fourth week	- 순수물질의 상태량 (1) - 순수물질의 상태량 (2)
Fifth week	- 순수물질의 상태량 (3) - 순수물질의 상태량 (4)
Sixth week	- 밀폐계의 에너지 해석 (1) - 밀폐계의 에너지 해석 (2)
Seventh week	- 밀폐계의 에너지 해석 (3) - 밀폐계의 에너지 해석 (4)
Eighth week	중간고사 및 풀이
Ninth week	- 검사체적의 질량 및 에너지 해석 (1) - 검사체적의 질량 및 에너지 해석 (2)
Tenth week	- 검사체적의 질량 및 에너지 해석 (3) - 검사체적의 질량 및 에너지 해석 (4)
Eleventh week	- 검사체적의 질량 및 에너지 해석 (5) - 검사체적의 질량 및 에너지 해석 (6)
Twelfth week	- 열역학 제2법칙 (1) - 열역학 제2법칙 (2)
Thirteenth week	- 열역학 제2법칙 (3) - 엔트로피 (1)
Fourteenth week	- 엔트로피 (2) - 엔트로피 (3)
Fifteenth week	기말고사 및 풀이
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Automatic Control 1	Course Number	0009441001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	/ 박기원	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-539:화(1-2A),수(1-2A)]
Office hours			

[1] Outline / Purpose

Modelling and mathematical description of dynamic systems in the time and frequency domain:
Impulse response, step response, transfer function. Methods for stability analysis including the Nyquist criterion. Control strategies: PID controller

[2] Course Learning Outcomes

- define basic concepts in automatic control
- determine relations between models of linear dynamic systems in form of differential equations, state space models, transient responses, transfer functions and frequency responses
- interpret and apply graphical methods and tools like block diagrams, root locus, Bode and Nyquist diagrams
- understand the function of simple controllers (PID controllers)

[3] Class Delivery Method

1. Test and slides
2. Deliver the information with lectures

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
70 %	0 %	30 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Katsuhiko Ogata	Publisher	Pearson	Textbook	Modern Control Engineering	Issued year	2009
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to Control systems (E-Learning Chat)
Second week	Laplace transform (E-Learning Chat)
Third week	Laplace transform
Fourth week	Mathematical Modeling of dynamic system
Fifth week	Mathematical Modeling of dynamic system
Sixth week	Mathematical Modeling of dynamic system
Seventh week	Transient and Steady-State response analysis
Eighth week	Midterm
Ninth week	Matlab
Tenth week	Transient and Steady-State response analysis
Eleventh week	Transient and Steady-State response analysis
Twelfth week	Root-Locus Analysis and Design
Thirteenth week	Root-Locus Analysis and Design
Fourteenth week	Root-Locus Analysis and Design
Fifteenth week	Frequency response analysis
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MECHANICAL VIBRATIONS	Course Number	EPA6032005
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	/ 윤종윤	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-539:목(2B-3)] [09-224:월(8B-9)]
Office hours			

[1] Outline / Purpose

This course will cover the practical issues on the basis of the fundamental knowledge of ordinary differential equations and method of constructing the mathematical models from the given mechanical system. Through this course work, students will get the fundamental knowledge of the vibration field and acquire the relevant factors to reduce the vibrations caused by the dynamic system. This fundamental concepts will be expanded from single-degree-of-freedom systems to multi-degree-of-freedom system on the basis of the modal analysis.

[2] Course Learning Outcomes

1. Acquire the fundamental knowledge about system modeling
2. Understand the basic factors of vibration connected to the system design
3. Understand and explain the dynamic characteristics with respect to the mechanical vibration

[3] Class Delivery Method

Lectures will be posted on the e-learning center.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	0 %	20 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
80 %	0 %	0 %	0 %	0 %	0 %	20 %	0 %

[4] Grading Policies

1. Construct the mathematical formulations from the given mechanical system
2. Understand the procedure to solve the mathematical equation with the fundamental concepts of vibration
3. Know the basic process to analyze the multi-degree-of-freedom system using the modal analysis

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	D.J. Inman	Publisher	Pearson Education	Textbook	Engineering Vibration	Issued year	2013
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	1.1. Introduction to Free Vibration 1.2. Harmonic Motion
Second week	1.2. Harmonic Motion 1.3. Viscous Damping 1.4. Modeling and Energy Methods
Third week	1.2. Harmonic Motion 1.3. Viscous Damping 1.4. Modeling and Energy Methods
Fourth week	1.4. Modeling and Energy Methods 1.5. Stiffness
Fifth week	2.1. Harmonic Excitation of Undamped Systems 2.2. Harmonic Excitation of Damped Systems
Sixth week	2.1. Harmonic Excitation of Undamped Systems 2.2. Harmonic Excitation of Damped
Seventh week	2.1. Harmonic Excitation of Undamped Systems 2.2. Harmonic Excitation of Damped 2.3. Alternative Representation
Eighth week	2.4. Base Excitation 2.5. Rotating Unbalance 2.6. Measurement
Ninth week	2.4. Base Excitation 2.5. Rotating Unbalance 2.6. Measurement 3.1. Impulse Response Function
Tenth week	3.1. Impulse Response Function 3.2. Response to an Arbitrary Input 3.3. Response to an Arbitrary Periodic Input
Eleventh week	3.3. Response to an Arbitrary Periodic Input 3.4. Transform Method 3.5. Response to Random Inputs
Twelfth week	3.5. Response to Random Inputs 3.6. Shock Spectrum 3.7. Measurement via Transfer Functions
Thirteenth week	4.1. Two-Degree-of-Freedom Model (Undamped) 4.2. Eigenvalues and Natural Frequencies
Fourteenth week	4.1. Two-Degree-of-Freedom Model (Undamped) 4.2. Eigenvalues and Natural Frequencies 4.3. Modal Analysis
Fifteenth week	4.2. Eigenvalues and Natural Frequencies 4.3. Modal Analysis
Sixteenth week	4.2. Eigenvalues and Natural Frequencies 4.3. Modal Analysis 4.4. More than Two Degrees of Freedom

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	System Dynamics 2	Course Number	0009442001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	/ 윤종윤	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-539:금(2B-3)] [09-224:화(5B-6)]
Office hours			

[1] Outline / Purpose

From the previous course (System Dynamics 1), students will acquire the fundamental knowledge to analyze the dynamic behavior of systems based on the frequency response functions and the analysis of system stability. This will guide the student to understand the basic concepts of vibration and automatic control well.

[2] Course Learning Outcomes

1. Enhance the techniqueto to derive the basic input-output equation
2. Know the fundamental concepts of solution methods for differential equations
3. Know how to develop a linear model based on the linearization of element and system model
4. Frequency and time response analysis

[3] Class Delivery Method

Lecture using PPT files and showing the relevant examples and problems based on the on-line (cyber.inu.ac.kr) through the whole period of semester

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	0 %	20 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
70 %	0 %	30 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

1. Understand the basic procedures to derive the input-output equation
2. Understand the solution methods using differential operator and transfer function methods
3. Understand the system responses based on frequency and time domain methods

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Charles M. Close, Dean K. Frederick	Publisher	John Wiley & Sons	Textbook	Modeling and analysis of dynamic systems	Issued year	2001
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	1. Analytical Solution of Linear Models – The complete solution of differential equations – First-order systems : Relevant out source will be announced at cyber.inu.ac.kr
Second week	1. Analytical Solution of Linear Models – First-order systems – The step function and impulse : Relevant out source will be announced at cyber.inu.ac.kr
Third week	1. Analytical Solution of Linear Models – The step function and impulse – Second-order systems
Fourth week	1. Analytical Solution of Linear Models – Second-order systems – Systems of order three and higher
Fifth week	2. Solution Methods for Differential Equations – Classical operator method
Sixth week	2. Solution Methods for Differential Equations – Laplace transform method: Basic concepts of Laplace transform
Seventh week	2. Solution Methods for Differential Equations – Transfer function analysis
Eighth week	2. Solution Methods for Differential Equations – Transfer function analysis
Ninth week	3. Developing a Linear Model – Linearization of a element law
Tenth week	3. Developing a Linear Model – Linearization of a element law
Eleventh week	3. Developing a Linear Model – Linearization of a system model
Twelfth week	3. Developing a Linear Model – Linearization of a system model
Thirteenth week	4. Frequency and Time Responses – Frequency analysis using transfer function
Fourteenth week	4. Frequency and Time Responses – Frequency analysis using transfer function
Fifteenth week	4. Frequency and Time Responses – Frequency analysis and its stability
Sixteenth week	4. Frequency and Time Responses – Examination of time domain analysis

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	SIGNALS AND SYSTEMS	Course Number	EI06062001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	/ 정현두	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[09-224:월(2B-3),수(5B-6)]
Office hours			

[1] Outline / Purpose

This course provides basics and backgrounds for signals and systems. The course will cover basic signals to represent periodic (and aperiodic) continuous-time signals and discrete-time systems, and it covers the linear-time invariant systems and its basic properties. Next, this course will cover frequency domain signal representation and system analysis methods using Fourier series, Fourier transform, Laplace transform, and Z-transform.

Prerequisites: Calculus 1&2

[2] Course Learning Outcomes

1. Learn how to represent periodic and aperiodic signals using mathematical representation
2. Understand basic properties of LTI systems and convolution
3. Understand how to analysis LTI systems using Fourier series/transform, Laplace transform, and Z-transform

[3] Class Delivery Method

This course will use lecture slides and blackboard for solving equations.
Lecture slides will be provided via e-learning.

** Deficited classes caused by COVID 19 outbreak will be supplemented by online real-time lectures, watching online videos, assignments, and so on.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	60 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm: 30%

Final: 40%

Homework/Quiz: 10%

Attendance: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	A. V. Oppenheim and A. S. Willsky	Publisher	Pearson	Textbook	Signals and Systems	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	S. S. Soliman and M. D. Srinath	Publisher	Pearson	Textbook	Continuous and Discrete Signals and Systems	Issued year	
(2)	Author	S. Haykin and B. V. Veen	Publisher	Wiley	Textbook	Signals and Systems	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Introduction – Continuous time & Discrete-time periodic signal – Basic signal representation – Suggested reading: Ch 1
Second week	Signals and Systems – Unit impulse and unit step function – Basic system properties – Suggested reading: Ch 1 – HW #1
Third week	Linear-time invariant system – Introduction to LTI systems – Discrete-time LTI systems and convolution sum – Suggested reading: Ch 2
Fourth week	Linear-time invariant system – Continuous-time LTI systems and convolution integral – Property of LTI systems – Suggested reading: Ch 2 – HW #2 and Quiz #1
Fifth week	Orthogonal signal representation and Fourier series – Orthogonal and orthonormal – Signal representation using orthogonal signals – Background for Fourier series – Suggested reading: subtext Ch. 3.2
Sixth week	Fourier series representation of continuous-time periodic signals – Response of LTI systems to complex exponential functions – Basic properties of continuous-time Fourier series – Suggested reading: Ch. 3 – HW #3
Seventh week	Fourier series representation of discrete-time periodic signals – Basic properties of discrete-time Fourier series – Suggested reading: Ch. 3
Eighth week	Midterm
Ninth week	Continuous-time Fourier transform – Fourier-transform for aperiodic signals – Basic properties of Fourier transform – Suggested reading: Ch. 4
Tenth week	Continuous-time Fourier transform and discrete-time Fourier transform – System analysis using CTFT – Sampling theorem – Introduction to DTFT – Suggested reading: Ch. 4 – HW #10
Eleventh week	Discrete-time Fourier transform and sampling theorem – Basic properties of DTFT – System analysis using DTFT – Suggested reading: Ch. 5 and Ch. 7 – Quiz #2
Twelfth week	Laplace transform – Introduction to Laplace transform – Basic properties of Laplace transform – Suggested reading: Ch. 9
Thirteenth week	Laplace transform & Introduction to Z-transform – System analysis using Laplace transform – Introduction to Z-transform – Suggested reading: Ch. 9 – HW #5
Fourteenth week	Z-Transform – Basic properties of Z-transform – System analysis using Z-transform – Suggested reading: Ch. 10
Fifteenth week	Final
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PROBABILITY AND STATISTICS	Course Number	EPG6114001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	/ 우현명	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[09-224:월(7-8A),목(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

This course aims to equip students with a fundamental understanding of the principles and applications of probability theory. This course will introduce basic concepts such as sample spaces, events, and probability axioms, providing a solid foundation for more advanced topics. Students explore conditional probability, independence, and various probability distributions, both discrete and continuous. The curriculum delves into the mathematical aspects of random variables, moments, and multiple random variables, preparing students to analyze and interpret real-world data. The class often incorporates practical applications, encouraging students to apply their knowledge to solve problems in diverse fields.

[2] Course Learning Outcomes

By the end of the course, students are expected to have a strong grasp of probability concepts and the ability to employ statistical reasoning, laying the groundwork for further studies in related disciplines.

[3] Class Delivery Method

This lecture will be conducted "in person" in the form of writing on a whiteboard. Please bring your notes and writing equipment when you come to class.

Supplementary class(es) will be given through an e-learning system (VOD).

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
90 %	0 %	10 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm: 30%

Final exam: 40%

Attendance: 20% (by the university rule)

Assignment (up to 4 assignments): 10%

① Percentage of grade evaluation

Exam	Attendance	Assignment
70 %	20 %	10 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Sheldon Ross	Publisher	Pearson	Textbook	A First Course in Probability – Tenth edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Introduction Combinatorial Analysis * Suggested reading: Chapter 1. Combinatorial Analysis
Second week	Combinatorial Analysis * Suggested reading: Chapter 1. Combinatorial Analysis
Third week	Axioms of Probability * Suggested reading: Chapter 2. Axioms of Probability
Fourth week	Axioms of Probability * Suggested reading: Chapter 2. Axioms of Probability
Fifth week	Conditional Probability and Independence * Suggested reading: Chapter 3. Conditional Probability and Independence
Sixth week	Random Variables * Suggested reading: Chapter 4. Random Variables
Seventh week	Random Variables * Suggested reading: Chapter 4. Random Variables
Eighth week	Midterm
Ninth week	Continuous Random Variables * Suggested reading: Chapter 5. Continuous Random Variables
Tenth week	Jointly Distributed Random Variables * Suggested reading: Chapter 6. Jointly Distributed Random Variables
Eleventh week	Jointly Distributed Random Variables * Suggested reading: Chapter 6. Jointly Distributed Random Variables
Twelfth week	Properties of Expectation * Suggested reading: Chapter 7. Properties of Expectation
Thirteenth week	Properties of Expectation * Suggested reading: Chapter 7. Properties of Expectation
Fourteenth week	Limit Theorems * Suggested reading: Chapter 8. Limit Theorems
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Finite Element Structural Analysis	Course Number	0009443001
Major / School Year	/ 4	completion division /Grade evaluation	/
Department/Professor	/ 한유성	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[27-105:화(5)(6)(7)]
Office hours			

[1] Outline / Purpose

This course develops modeling, analysis, and design methods for the engineering problems.

[2] Course Learning Outcomes

n successful completion of this course, a student will be able to (1) understand the concepts of FE formulation, and (2) analyze the engineering problems using the FE codes.

[3] Class Delivery Method

This lecture consists of two parts: In the first half of the lecture, students will learn the fundametal theory of the finite element methids. the second half of the lecture focuses on the analysis of the engineering problems using the Abaqus, the commercial FE SW.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
35 %	20 %	45 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Overview, The direct stiffness method
Second week	FEM Modeling
Third week	Mesh, Loads and BCs Problem solving
Fourth week	plane stress problem
Fifth week	three-node plane stress isoparametric representation
Sixth week	Shape function Numerical Integration
Seventh week	Isoparametric representation
Eighth week	Midterm Exam
Ninth week	Introduction of Abaqus
Tenth week	Introduction of Abaqus
Eleventh week	FE structural analysis
Twelfth week	FE structural analysis
Thirteenth week	Heat transfer analysis
Fourteenth week	Thermal stress analysis
Fifteenth week	Course review and problem solving session
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Finite Element Structural Analysis	Course Number	0009443002
Major / School Year	/ 4	completion division /Grade evaluation	/
Department/Professor	/ 한유성	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[27-105:목(7)(8)(9)]
Office hours			

[1] Outline / Purpose

This course develops modeling, analysis, and design methods for the engineering problems.

[2] Course Learning Outcomes

On successful completion of this course, a student will be able to (1) understand the concepts of FE formulation, and (2) analyze the engineering problems using the FE codes.

[3] Class Delivery Method

This lecture consists of two parts: In the first half of the lecture, students will learn the fundamental theory of the finite element methods. the second half of the lecture focuses on the analysis of the engineering problems using the Abaqus, the commercial FE SW.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
35 %	20 %	45 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Overview, The direct stiffness method
Second week	FEM Modeling
Third week	Mesh, Loads and BCs Problem solving
Fourth week	plane stress problem
Fifth week	three-node plane stress isoparametric representation
Sixth week	Shape function Numerical Integration
Seventh week	Isoparametric representation
Eighth week	Midterm Exam
Ninth week	Introduction of Abaqus
Tenth week	Introduction of Abaqus
Eleventh week	FE structural analysis
Twelfth week	FE structural analysis
Thirteenth week	Heat transfer analysis
Fourteenth week	Thermal stress analysis
Fifteenth week	Course review and problem solving session
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	DIGITAL ENGINEERING	Course Number	IAA6005001
Major / School Year	Dept. of Computer Science and Engineering / 2	completion division /Grade evaluation	/
Department/Professor	Dept. of Computer Science and Engineering / 김우일	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[07-505:화(8B-9),목(5B-6)]
Office hours			

[1] Outline / Purpose

This course covers basic digital logic circuits and their design.

It consists of Boolean algebra, logic gates, combinational logic circuits, sequential logic circuits, counter, register, and etc

[2] Course Learning Outcomes

Students are expected to obtain knowledge of basic digital system and understand the concept of the system design.

[3] Class Delivery Method

lecture in English

Assignment, Mid-term & Final exams

Blended learning (off-line and on-line mixed) course, Tuesday: on-line class (lecture recordings), Thursday: off-line class

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	20 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	80 %	0 %	0 %	0 %	20 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	M. Morris Mano and Michael D. Ciletti	Publisher	Pearson	Textbook	Digital Design, 5th Ed.	Issued year	2013 1201
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Frank Vahid	Publisher	John Wiley & Sons	Textbook	Digital Design with RTL Design, Verilog & VHDL, 2nd Ed.	Issued year	
(2)	Author	Stephen Brown & Zvon	Publisher	McGraw-Hill	Textbook	Fundamentals of Digital Logic with VHDL Design, 3rd Ed.	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction Number system
Second week	Digital codes
Third week	Basic logic gates
Fourth week	Boolean algebra
Fifth week	Minimization
Sixth week	Combinational logic circuits 1/2
Seventh week	Combinational logic circuits 2/2
Eighth week	Mid-term exam
Ninth week	Flip-flops 1/2
Tenth week	Flip-flops 2/2
Eleventh week	Synchronous sequential logic circuits 1/2
Twelfth week	Synchronous sequential logic circuits 2/2
Thirteenth week	Counters 1/2
Fourteenth week	Counters 2/2
Fifteenth week	Registers
Sixteenth week	Final exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	DIGITAL ENGINEERING	Course Number	IAA6005002
Major / School Year	Dept. of Computer Science and Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Computer Science and Engineering / 김우일	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[07-505:수(5B-6),목(7-8A)]
Office hours			

[1] Outline / Purpose

This course covers basic digital logic circuits and their design.

It consists of Boolean algebra, logic gates, combinational logic circuits, sequential logic circuits, counter, register, and etc

[2] Course Learning Outcomes

Students are expected to obtain knowledge of basic digital system and understand the concept of the system design.

[3] Class Delivery Method

lecture in English

Assignment, Mid-term & Final exams

Blended learning (off-line and on-line mixed) course, Wednesday: on-line class (lecture recordings), Thursday: off-line class

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	0 %	0 %	20 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	80 %	0 %	0 %	0 %	20 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	M. Morris Mano and Michael D. Ciletti	Publisher	Pearson	Textbook	Digital Design, 5th Ed.	Issued year	2013 1201
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Frank Vahid	Publisher	John Wiley & Sons	Textbook	Digital Design with RTL Design, Verilog & VHDL, 2nd Ed.	Issued year	
(2)	Author	Stephen Brown & Zvon	Publisher	McGraw-Hill	Textbook	Fundamentals of Digital Logic with VHDL Design, 3rd Ed.	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction Number system
Second week	Digital codes
Third week	Basic logic gates
Fourth week	Boolean algebra
Fifth week	Minimization
Sixth week	Combinational logic circuits 1/2
Seventh week	Combinational logic circuits 2/2
Eighth week	Mid-term exam
Ninth week	Flip-flops 1/2
Tenth week	Flip-flops 2/2
Eleventh week	Synchronous sequential logic circuits 1/2
Twelfth week	Synchronous sequential logic circuits 2/2
Thirteenth week	Counters 1/2
Fourteenth week	Counters 2/2
Fifteenth week	Registers
Sixteenth week	Final exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	NUMERICAL ANALYSIS	Course Number	IAB6016001
Major / School Year	Dept. of Information and Telecommunication Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Information and Telecommunication Engineering / 강승택	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[07-417:월(7-8A),목(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

Every discipline and activity of engineering requires mathematical operations as ways of expressing physical phenomena. In order to carry out calculation and equation solving using the computer after mathematical modeling, numerical analysis methods are adopted to make things come true.

[2] Course Learning Outcomes

Hopefully, students are able to know number defining, linear algebra, approximation, root-finding, differentiation and integration, and apply them to get the solutions to mathematical expressions of engineering problems.

[3] Class Delivery Method

Most of the classes have the professor's teaching. Frequently, students are asked questions and the ways they make an effort to answer them are checked by the professor.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	%	%	%	20 %	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	%	90 %	%	%	%	%	%

[4] Grading Policies

From the first week of March to the second week of March, the on-line and off-line styles of teaching will go together. The on-line class is recommended to the students who cannot commute every time due to not living in the Greater Incheon area.

Otherwise, students are asked to come to the campus.

As of the third week of March, unless an emergency occurs, all the students should join the class in person.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Steven Chapra	Publisher	Prime, ISBN-13: 978-0073401065	Textbook	Numerical Methods for Engineers, Sixth Edition	Issued year	2009
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Real-time On-line Lecture through 'Kakao TV Application' Contents: The field of numerical analysis
Second week	Real-time On-line Lecture through 'Kakao TV Application' Contents: Functions and their approximate expressions : Taylor expansion, etc.
Third week	Functions and their approximate expressions : Other orthogonal basis function expansion, polynomials(Chebyshev)
Fourth week	Functions and their approximate expressions : Other orthogonal basis function expansion, polynomials(Fourier)
Fifth week	Functions and their approximate expressions : Rational functions
Sixth week	Differentiation and slopes
Seventh week	Differentiation and Difference
Eighth week	Mid-terms
Ninth week	Integration and summation I
Tenth week	Integration and summation II
Eleventh week	Interpolation I
Twelfth week	Interpolation II
Thirteenth week	Extrapolation
Fourteenth week	Simultaneous equations and matrix I
Fifteenth week	Simultaneous equations and matrix II
Sixteenth week	Finals

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Internet of Things	Course Number	0006837001
Major / School Year	Dept. of Embedded-Systems Engineering / 4	completion division /Grade evaluation	/
Department/Professor	Dept. of Embedded-Systems Engineering / 김현범	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[07-313:수(2B-3),목(2B-3)]
Office hours			

[1] Outline / Purpose

With the fundamental goal of training system design and its application, this course focuses on the below topics.

- Understanding of the wide range of modern and recent network technologies and protocols.
- Applicability of IoT, system design related to IoT based on the study of advanced technique and protocol in smart cities.

[2] Course Learning Outcomes

- Students learn classical/fundamental topics and structures in computer networks.
- Students gain knowledge of several systems, protocols, techniques for IoT.
- Students learn and analyze aspects of various advanced topics and applicable areas for IoT.

[3] Class Delivery Method

This course will be proceeded based on Lecture Notes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
15 %	0 %	70 %	0 %	0 %	0 %	15 %	0 %

[4] Grading Policies

Midterm Exam: 30%

Final Exam: 30%

Assignments: 20%

Attendance and Participation: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Peterson and Davie	Publisher	Morgan Kaufmann	Textbook	Computer Networks: A Systems Approach (5th edition)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course review and Introduction of Internetworking (1)
Second week	Course review and Introduction of Internetworking (2)
Third week	Congestion
Fourth week	BGP (Border Gateway Protocol) (1)
Fifth week	BGP (Border Gateway Protocol) (2)
Sixth week	P2P (Peer to Peer) System, MPLS
Seventh week	Network Security
Eighth week	Midterm Exam
Ninth week	IoT System and Sensor Coverage Application, Multicast, DVMRP (Distance Vector Multicast Routing Protocol) , MOSPF (Multicast Open Shortest Path First) (1)
Tenth week	Barrier Applicability in Smart Cities, DVMRP (Distance Vector Multicast Routing Protocol), MOSPF (Multicast Open Shortest Path First) (2)
Eleventh week	Promising Topics in Advanced Smart Cities, Inter-domain Multicast Routing, PIM (Protocol Independent Multicast)
Twelfth week	Smart UAV-Enabled Applications and Detection Issues,Ad Hoc Network and Sensor Network Applications (1)
Thirteenth week	Virtual Emotion-based Systems and Research Issues,Ad Hoc Network and Sensor Network Applications (2)
Fourteenth week	DSR, AODV
Fifteenth week	Final Exam
Sixteenth week	Classes (on Legal Holiday) will be replaced with Online Lecture.

[7] Assignments

The first assignment	assignment	To be posted	submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MANAGEMENT	Course Number	JA06050001
Major / School Year	Division of Business Administration / 1	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김경미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-201:화(2B-3),목(2B-3)]
Office hours			

[1] Outline / Purpose

This course is an instruction to the basic concepts of management and organization. A review of the historical development of management practices will precede the core areas of study, which include the processes of decision making and planning in organizations, concepts of organization design, measurement of control of organizational performance, leadership, and the direction of human activity.

[2] Course Learning Outcomes

Understand fundamental concepts and principles of management, including basic roles, skills, and function of management:

Be knowledgeable of historical development, theoretical aspects and practice application of managerial process:

Be familiar with interactions between environments, technology, human resources, and organizations in order to achieve high performance;

Be aware of ethical dilemmas faced by managers and the social responsibilities of business

[3] Class Delivery Method

This course is a student centered course. Preparation for class and participation in discussions are expected. Students must both read the assigned materials and complete all required assignments before the class in which they are due. Students are also encouraged to participate into class discussions, assignments, activities, and in-class quizzes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	20 %	20 %	0 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	80 %	0 %	10 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Gulati, Mayo, Nohria	Publisher	Cengage Learning	Textbook	Management	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation, Introduction and class plan
Second week	Class activity Introduction to Management
Third week	Class activity The global business environment
Fourth week	Class activity Ethics and social responsibility
Fifth week	Introduction to strategy Class work
Sixth week	Introduction to strategy
Seventh week	presentation
Eighth week	Mid-term Exam April 22, 2025. 7–8 p.m. at Building Number 29 and room number 103.
Ninth week	Organizational design
Tenth week	Organizational culture
Eleventh week	Managing human capital
Twelfth week	Performance management
Thirteenth week	presentation
Fourteenth week	Presentation
Fifteenth week	Final exam will be held on June 10, 2025. 7–8 p.m. at Building Number 29 and room number 103.
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MANAGEMENT	Course Number	JA06050005
Major / School Year	Division of Business Administration / 1	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 박현준	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-203:화(7-8A)] [14-507:월(7-8A)]
Office hours			

[1] Outline / Purpose

This is an introductory course in management. The course will provide fundamental concepts and frameworks for formulating implementing and understanding management to provide basic frameworks for the actual world of business.

While giving you some analytical approaches that are useful to widely different problems in the business world, the course will also enable you to develop an appreciation of management. Both analytical ability and creativity will be awarded in the classroom as in real life.

The functional skills acquired in earlier courses may be applied to problems that typically face the general manager. In preparing each chapter, you may be able to improve your management insights and knowledge by using the techniques learned throughout the lessons.

[2] Course Learning Outcomes

By the end of the course, you should be able to understand: fundamental concepts and principles of management, including the basic roles, skills, and functions of management, theoretical aspects and practice application of managerial process, familiar with interactions between the environment, and the ethical dilemmas faced by managers, and the social responsibilities of business.

[3] Class Delivery Method

Each week the class lecture will cover the various fields in the management world. It will range from globalization, production, organizational culture, strategy, and more.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	%	20 %	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	100 %	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Gulati, Ranjay, Mayo, Anthony J., & Nohria, Nitin	Publisher	Cengage Learning	Textbook	Management	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction
Second week	Chapter 1: Introduction to Management
Third week	Chapter 2: The Global Business Environment
Fourth week	Chapter 3: Ethics and Corporate Social Responsibility
Fifth week	Chapter 4: Introduction to Strategy
Sixth week	Chapter 5: Business–Level Strategy (I)
Seventh week	Chapter 6: Corporate–Level Strategy
Eighth week	Midterm
Ninth week	Chapter 8: Organizational Culture
Tenth week	Chapter 10: Performance Management
Eleventh week	Chapter 13: Becoming a Leader: Knowing Yourself
Twelfth week	Chapter 14: Motivation
Thirteenth week	Final Group Case Presentation
Fourteenth week	Final Group Case Presentation
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MANAGEMENT	Course Number	JA06050004
Major / School Year	Division of Business Administration / 1	completion division / Grade evaluation	/
Department/Professor	Division of Business Administration / 박현준	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-202:수(5B-6)] [14-507:월(4-5A)]
Office hours			

[1] Outline / Purpose

This is an introductory course in management. The course will provide fundamental concepts and frameworks for formulating implementing and understanding management to provide basic frameworks for the actual world of business.

While giving you some analytical approaches that are useful to widely different problems in the business world, the course will also enable you to develop an appreciation of management. Both analytical ability and creativity will be awarded in the classroom as in real life.

The functional skills acquired in earlier courses may be applied to problems that typically face the general manager. In preparing each chapter, you may be able to improve your management insights and knowledge by using the techniques learned throughout the lessons.

[2] Course Learning Outcomes

By the end of the course, you should be able to understand: fundamental concepts and principles of management, including the basic roles, skills, and functions of management, theoretical aspects and practice application of managerial process, familiar with interactions between the environment, and the ethical dilemmas faced by managers, and the social responsibilities of business.

[3] Class Delivery Method

Each week the class lecture will cover the various fields in the management world. It will range from globalization, production, organizational culture, strategy, and more.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	%	20 %	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	100 %	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Gulati, Ranjay, Mayo, Anthony J., & Nohria, Nitin	Publisher	Cengage Learning	Textbook	Management	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction
Second week	Chapter 1: Introduction to Management
Third week	Chapter 2: The Global Business Environment
Fourth week	Chapter 3: Ethics and Corporate Social Responsibility
Fifth week	Chapter 4: Introduction to Strategy
Sixth week	Chapter 5: Business-Level Strategy (I)
Seventh week	Chapter 6: Corporate-Level Strategy
Eighth week	Midterm
Ninth week	Chapter 8: Organizational Culture
Tenth week	Chapter 10: Performance Management
Eleventh week	Chapter 13: Becoming a Leader: Knowing Yourself
Twelfth week	Chapter 14: Motivation
Thirteenth week	Final Group Case Presentation
Fourteenth week	Final Group Case Presentation
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MANAGEMENT	Course Number	JA06050003
Major / School Year	Division of Business Administration / 1	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김경미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-201:화(8B-9),목(8B-9)]
Office hours			

[1] Outline / Purpose

This course is an instruction to the basic concepts of management and organization. A review of the historical development of management practices will precede the core areas of study, which include the processes of decision making and planning in organizations, concepts of organization design, measurement of control of organizational performance, leadership, and the direction of human activity.

[2] Course Learning Outcomes

Understand fundamental concepts and principles of management, including basic roles, skills, and function of management:

Be knowledgeable of historical development, theoretical aspects and practice application of managerial process:

Be familiar with interactions between environments, technology, human resources, and organizations in order to achieve high performance;

Be aware of ethical dilemmas faced by managers and the social responsibilities of business

[3] Class Delivery Method

This course is a student centered course. Preparation for class and participation in discussions are expected. Students must both read the assigned materials and complete all required assignments before the class in which they are due. Students are also encouraged to participate into class discussions, assignments, activities, and in-class quizzes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	20 %	20 %	0 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	80 %	0 %	10 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Gulati, Mayo, Nohria	Publisher	Cengage Learning	Textbook	Management	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation, Introduction and class plan
Second week	Class activity Introduction to Management
Third week	Class activity The global business environment
Fourth week	Class activity Ethics and social responsibility
Fifth week	Introduction to strategy Class work
Sixth week	Introduction to strategy
Seventh week	presentation
Eighth week	Mid-term Exam April 22, 2025. 7–8 p.m. at Building Number 29 and room number 103.
Ninth week	Organizational design
Tenth week	Organizational culture
Eleventh week	Managing human capital
Twelfth week	Performance management
Thirteenth week	presentation
Fourteenth week	Presentation
Fifteenth week	Final exam will be held on June 10, 2025. 7–8 p.m. at Building Number 29 and room number 103.
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MANAGEMENT	Course Number	JA06050002
Major / School Year	Division of Business Administration / 1	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김경미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-201:화(7-8A),목(7-8A)]
Office hours			

[1] Outline / Purpose

This course is an instruction to the basic concepts of management and organization. A review of the historical development of management practices will precede the core areas of study, which include the processes of decision making and planning in organizations, concepts of organization design, measurement of control of organizational performance, leadership, and the direction of human activity.

[2] Course Learning Outcomes

Understand fundamental concepts and principles of management, including basic roles, skills, and function of management:

Be knowledgeable of historical development, theoretical aspects and practice application of managerial process:

Be familiar with interactions between environments, technology, human resources, and organizations in order to achieve high performance;

Be aware of ethical dilemmas faced by managers and the social responsibilities of business

[3] Class Delivery Method

This course is a student centered course. Preparation for class and participation in discussions are expected. Students must both read the assigned materials and complete all required assignments before the class in which they are due. Students are also encouraged to participate into class discussions, assignments, activities, and in-class quizzes.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	20 %	20 %	0 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	80 %	0 %	10 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Gulati, Mayo, Nohria	Publisher	Cengage Learning	Textbook	Management	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation, Introduction and class plan
Second week	Class activity Introduction to Management
Third week	Class activity The global business environment
Fourth week	Class activity Ethics and social responsibility
Fifth week	Introduction to strategy Class work
Sixth week	Introduction to strategy
Seventh week	presentation
Eighth week	Mid-term Exam April 22, 2025. 7–8 p.m. at Building Number 29 and room number 103.
Ninth week	Organizational design
Tenth week	Organizational culture
Eleventh week	Managing human capital
Twelfth week	Performance management
Thirteenth week	presentation
Fourteenth week	Presentation
Fifteenth week	Final exam will be held on June 10, 2025. 7–8 p.m. at Building Number 29 and room number 103.
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MANAGEMENT INFORMATION	Course Number	JA06013002
Major / School Year	Division of Business Administration / 2	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김태훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-202:월(5B-6)] [29-413:수(5B-6)]
Office hours			

[1] Outline / Purpose

In every industry and firm virtually, information technology (IT) drives change, creates opportunities, and supports complex enterprises. Leaders who fail to understand the operational and strategic importance of IT will not be able to keep up with the pace of their competitors. IT has moved beyond the automation of back-office functions into the foreground of business strategy and plays critical roles in competitive positioning and business process design.

When all the contemporary companies have access to essentially the same IT resources (telecommunications, hardware, and software), the difference in competitive advantages and economic benefits that firms gain from IT often rests on the ability of management to use it innovatively. Understanding the various aspects of modern IT and how IT can be used is crucial for students with business majors today.

The emerging new technology enables firms to collect and analyze large-scale data to achieve business value. Such skills of data scientists are critical to figure out customer needs and predict market trends. We will discuss the conceptual approaches towards big data and do the business-analytics practices to be well ready to suggest hidden insights and practical implications on businesses and be professional businessmen for your successful careers.

[2] Course Learning Outcomes

This course aims to provide students with an introduction to IT-enabled approaches to information management in business contexts. Upon completion of this course, students shall be able to:

1. model business processes and stimulate financial and operational effects of a technological change on a company's business process;
2. organize and analyze data for business decisions using business intelligence and large-scale data analytics tools;
3. extract and analyze data from a database to enhance managerial decision-making;
4. evaluate IT enablers and examine their relations with business strategy, process, and organization.

This course will also provide students with:

1. skills in producing professional quality business documents, conveying professional quality presentations, and communicating ideas persuasively;
2. ability to lead and work effectively in a group;
3. preparation for future careers in business and social environments deeply permeated with and dependent upon IT.

[3] Class Delivery Method

Lectures, presentations, & exams

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Exams (60%)

Attendance (20%)

Presentations (20%)

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Paige Baltzan	Publisher	McGraw-Hill	Textbook	Business Driven Information Systems, 7th Edition	Issued year	2021
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Chapter 1. Management information systems: Business driven MIS
Second week	Chapter 2. Decisions & processes: Value driven business
Third week	Chapter 3. E-business: Electronic business value
Fourth week	Chapter 4. Ethics & information security: MIS business concerns
Fifth week	Chapter 5. Infrastructures: Sustainable technologies
Sixth week	Chapter 6. Data: Business intelligence
Seventh week	Case study presentations
Eighth week	Midterm exam
Ninth week	Chapter 7. Networks: Mobile business
Tenth week	Chapter 8. Enterprise applications: Business communications
Eleventh week	Chapter 9. Systems development & project management: Corporate responsibility
Twelfth week	Appendix A. Hardware & software basics Appendix B. Networks & telecommunications Appendix C. Designing databases
Thirteenth week	Appendix D. Emerging trends & technologies Appendix E. Connectivity: The business value of networked world
Fourteenth week	Group project presentations
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	MANAGEMENT INFORMATION	Course Number	JA06013003
Major / School Year	Division of Business Administration / 2	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김태훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-202:월(7-8A)] [29-413:수(7-8A)]
Office hours			

[1] Outline / Purpose

In every industry and firm virtually, information technology (IT) drives change, creates opportunities, and supports complex enterprises. Leaders who fail to understand the operational and strategic importance of IT will not be able to keep up with the pace of their competitors. IT has moved beyond the automation of back-office functions into the foreground of business strategy and plays critical roles in competitive positioning and business process design.

When all the contemporary companies have access to essentially the same IT resources (telecommunications, hardware, and software), the difference in competitive advantages and economic benefits that firms gain from IT often rests on the ability of management to use it innovatively. Understanding the various aspects of modern IT and how IT can be used is crucial for students with business majors today.

The emerging new technology enables firms to collect and analyze large-scale data to achieve business value. Such skills of data scientists are critical to figure out customer needs and predict market trends. We will discuss the conceptual approaches towards big data and do the business-analytics practices to be well ready to suggest hidden insights and practical implications on businesses and be professional businessmen for your successful careers.

[2] Course Learning Outcomes

This course aims to provide students with an introduction to IT-enabled approaches to information management in business contexts. Upon completion of this course, students shall be able to:

1. model business processes and stimulate financial and operational effects of a technological change on a company's business process;
2. organize and analyze data for business decisions using business intelligence and large-scale data analytics tools;
3. extract and analyze data from a database to enhance managerial decision-making;
4. evaluate IT enablers and examine their relations with business strategy, process, and organization.

This course will also provide students with:

1. skills in producing professional quality business documents, conveying professional quality presentations, and communicating ideas persuasively;
2. ability to lead and work effectively in a group;
3. preparation for future careers in business and social environments deeply permeated with and dependent upon IT.

[3] Class Delivery Method

Lectures, presentations, & exams

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Exams (60%)

Attendance (20%)

Presentations (20%)

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Paige Baltzan	Publisher	McGraw-Hill	Textbook	Business Driven Information Systems, 7th Edition	Issued year	2021
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Chapter 1. Management information systems: Business driven MIS
Second week	Chapter 2. Decisions & processes: Value driven business
Third week	Chapter 3. E-business: Electronic business value
Fourth week	Chapter 4. Ethics & information security: MIS business concerns
Fifth week	Chapter 5. Infrastructures: Sustainable technologies
Sixth week	Chapter 6. Data: Business intelligence
Seventh week	Case study presentations
Eighth week	Midterm exam
Ninth week	Chapter 7. Networks: Mobile business
Tenth week	Chapter 8. Enterprise applications: Business communications
Eleventh week	Chapter 9. Systems development & project management: Corporate responsibility
Twelfth week	Appendix A. Hardware & software basics Appendix B. Networks & telecommunications Appendix C. Designing databases
Thirteenth week	Appendix D. Emerging trends & technologies Appendix E. Connectivity: The business value of networked world
Fourteenth week	Group project presentations
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MARKETING	Course Number	JA06001001
Major / School Year	Division of Business Administration / 2	completion division / Grade evaluation	/
Department/Professor	Division of Business Administration / 허승	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-103:화(2B-3),수(2B-3)]
Office hours			

[1] Outline / Purpose

This course intends to serve as an introduction to marketing through exploring "the marketing concept". From this course, you will learn how to successfully approach the right customers by introducing new products, designing price schemes, communicating product value, and distributing product through intermediaries, all of which require deep understanding of customers, competitors and the economy.

[2] Course Learning Outcomes

1. Examine both quantitative and qualitative factors of marketing through exploring various analytic tools and strategic considerations.
2. Review the impacts of marketing decisions on various stakeholders such as customers, employees, shareholders, business partners, and the society.
3. Understand various levels of marketing decisions from operational issues to philosophical considerations, and from maximizing short-term profits to managing long-term relationship with customers.

[3] Class Delivery Method

This is a blended course and there will be both online and offline classes. Details will be provided later.

This course will highlight both theory and practice of marketing through a mix of lectures, case discussions, a hands-on project, and a guest lecture.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	William D. Perreault, Jr., Joseph Cannon, and E. Jerome McCarthy	Publisher	McGraw-Hill Education	Textbook	Essentials of Marketing (17th Edition)	Issued year	2020
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	The relevant chapter of the textbook (details will be announced later)
Second week	The relevant chapter of the textbook (details will be announced later)
Third week	The relevant chapter of the textbook (details will be announced later)
Fourth week	The relevant chapter of the textbook (details will be announced later)
Fifth week	The relevant chapter of the textbook (details will be announced later)
Sixth week	The relevant chapter of the textbook (details will be announced later)
Seventh week	The relevant chapter of the textbook (details will be announced later)
Eighth week	The relevant chapter of the textbook (details will be announced later)
Ninth week	The relevant chapter of the textbook (details will be announced later)
Tenth week	The relevant chapter of the textbook (details will be announced later)
Eleventh week	The relevant chapter of the textbook (details will be announced later)
Twelfth week	The relevant chapter of the textbook (details will be announced later)
Thirteenth week	The relevant chapter of the textbook (details will be announced later)
Fourteenth week	The relevant chapter of the textbook (details will be announced later)
Fifteenth week	The relevant chapter of the textbook (details will be announced later)
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	PRINCIPLES OF MARKETING	Course Number	JA06001002
Major / School Year	Division of Business Administration / 2	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 허승	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-103:화(5B-6),수(5B-6)]
Office hours			

[1] Outline / Purpose

This course intends to serve as an introduction to marketing through exploring “the marketing concept”. From this course, you will learn how to successfully approach the right customers by introducing new products, designing price schemes, communicating product value, and distributing product through intermediaries, all of which require deep understanding of customers, competitors and the economy.

[2] Course Learning Outcomes

1. Examine both quantitative and qualitative factors of marketing through exploring various analytic tools and strategic considerations.
2. Review the impacts of marketing decisions on various stakeholders such as customers, employees, shareholders, business partners, and the society.
3. Understand various levels of marketing decisions from operational issues to philosophical considerations, and from maximizing short-term profits to managing long-term relationship with customers.

[3] Class Delivery Method

This is a blended course and there will be both online and offline classes. Details will be provided later.

This course will highlight both theory and practice of marketing through a mix of lectures, case discussions, a hands-on project, and a guest lecture.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	William D. Perreault, Jr., Joseph Cannon, and E. Jerome McCarthy	Publisher	McGraw-Hill Education	Textbook	Essentials of Marketing (17th Edition)	Issued year	2020
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	The relevant chapter of the textbook (details will be announced later)
Second week	The relevant chapter of the textbook (details will be announced later)
Third week	The relevant chapter of the textbook (details will be announced later)
Fourth week	The relevant chapter of the textbook (details will be announced later)
Fifth week	The relevant chapter of the textbook (details will be announced later)
Sixth week	The relevant chapter of the textbook (details will be announced later)
Seventh week	The relevant chapter of the textbook (details will be announced later)
Eighth week	The relevant chapter of the textbook (details will be announced later)
Ninth week	The relevant chapter of the textbook (details will be announced later)
Tenth week	The relevant chapter of the textbook (details will be announced later)
Eleventh week	The relevant chapter of the textbook (details will be announced later)
Twelfth week	The relevant chapter of the textbook (details will be announced later)
Thirteenth week	The relevant chapter of the textbook (details will be announced later)
Fourteenth week	The relevant chapter of the textbook (details will be announced later)
Fifteenth week	The relevant chapter of the textbook (details will be announced later)
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Business and Culture	Course Number	0010927001
Major / School Year	Division of Business Administration / 3	completion division / Grade evaluation	/
Department/Professor	Division of Business Administration / 김경미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[14-201:월(2B-3),수(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

This course explores the intersection of business and culture, with a focus on how cultural understanding enhances global business practices, especially in the hospitality and travel industries. We will analyze how cultural factors shape consumer behavior, communication styles, and business etiquette, as well as examine sustainable practices that support responsible tourism and hospitality.

[2] Course Learning Outcomes

By the end of this course, students will:

1. Understand the influence of culture on business practices across different regions.
2. Develop skills in cross-cultural communication and sensitivity.
3. Explore sustainable tourism and hospitality practices.
4. Design a culturally sensitive, sustainable business plan for a chosen international market.
5. To understand the impact of cultural differences on global business practices and consumer behavior.
6. To examine key geographic, demographic, and cultural factors that influence the hospitality and travel industries.
7. To explore sustainable business practices and their role in fostering responsible global tourism and hospitality.
8. To develop skills in cultural awareness, international market analysis, and strategic planning for cross-cultural business success.

[3] Class Delivery Method

Course Expectations

This course is student-centered, emphasizing active participation and preparation. Here are the key expectations:

- Preparation for Class:
 - o Read all assigned materials before the class in which they are due.
 - o Complete all required assignments prior to the relevant class session.
- Class Participation:
 - o Engage actively in class discussions, assignments, and activities.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	10 %	0 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	20 %	10 %	0 %	10 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Erin Meyer	Publisher		Textbook	Culture map	Issued year	
(2)	Author	Geert Hofstede	Publisher		Textbook	Culture and organization	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation
Second week	Introduction to Business and Culture
Third week	Cross-Cultural Communication in Business
Fourth week	Business Etiquette and Protocol in Different Cultures
Fifth week	Globalization and Its Impact on Local Cultures
Sixth week	Cultural Dimensions in Business (Hofstede's Model and Beyond)
Seventh week	class activity
Eighth week	Mid term
Ninth week	Cultural Heritage and Tourism
Tenth week	Festivals and Events as Business Opportunities
Eleventh week	Sustainable Business Practices in Global Hospitality
Twelfth week	Destination Marketing and Cultural Identity
Thirteenth week	Ethics in Global Business and Cultural Sensitivity
Fourteenth week	Business Innovation and Cultural Adaptation
Fifteenth week	Final Project Presentation
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Business and Culture	Course Number	0010927002
Major / School Year	Division of Business Administration / 3	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김경미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[14-201:월(5B-6),수(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

This course explores the intersection of business and culture, with a focus on how cultural understanding enhances global business practices, especially in the hospitality and travel industries. We will analyze how cultural factors shape consumer behavior, communication styles, and business etiquette, as well as examine sustainable practices that support responsible tourism and hospitality.

[2] Course Learning Outcomes

By the end of this course, students will:

1. Understand the influence of culture on business practices across different regions.
2. Develop skills in cross-cultural communication and sensitivity.
3. Explore sustainable tourism and hospitality practices.
4. Design a culturally sensitive, sustainable business plan for a chosen international market.
5. To understand the impact of cultural differences on global business practices and consumer behavior.
6. To examine key geographic, demographic, and cultural factors that influence the hospitality and travel industries.
7. To explore sustainable business practices and their role in fostering responsible global tourism and hospitality.
8. To develop skills in cultural awareness, international market analysis, and strategic planning for cross-cultural business success.

[3] Class Delivery Method

Course Expectations

This course is student-centered, emphasizing active participation and preparation. Here are the key expectations:

- Preparation for Class:
 - o Read all assigned materials before the class in which they are due.
 - o Complete all required assignments prior to the relevant class session.
- Class Participation:
 - o Engage actively in class discussions, assignments, and activities.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	10 %	0 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	20 %	10 %	0 %	10 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Erin Meyer	Publisher		Textbook	Culture map	Issued year	
(2)	Author	Geert Hofstede	Publisher		Textbook	Culture and organization	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation
Second week	Introduction to Business and Culture
Third week	Cross-Cultural Communication in Business
Fourth week	Business Etiquette and Protocol in Different Cultures
Fifth week	Globalization and Its Impact on Local Cultures
Sixth week	Cultural Dimensions in Business (Hofstede's Model and Beyond)
Seventh week	class activity
Eighth week	Mid term
Ninth week	Cultural Heritage and Tourism
Tenth week	Festivals and Events as Business Opportunities
Eleventh week	Sustainable Business Practices in Global Hospitality
Twelfth week	Destination Marketing and Cultural Identity
Thirteenth week	Ethics in Global Business and Cultural Sensitivity
Fourteenth week	Business Innovation and Cultural Adaptation
Fifteenth week	Final Project Presentation
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	INTERNET MARKETING	Course Number	JA06062001
Major / School Year	Division of Business Administration / 3	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김영균	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number	8358718	A weekday / class /	[14-203:수(5B-6),목(5B-6)]
Office hours		lecture room	

[1] Outline / Purpose

By completing course requirements, you will be able to understand the marketing principles, strategies, and tactics associated with dominant Internet business models, the dynamics and taxonomy of business models and the elements of appraising business models. The course consists of nine independent yet interrelated modules. Based on the objectives explained above, these modules are developed to address key areas, including managerial functions (dynamics and taxonomy); finance (valuing and appraising) and marketing functions (product, price, position and promotion) ship management. All these issues should be examined in the context of the fast-changing new economy and knowledge-based society

[2] Course Learning Outcomes

This course will examine Internet Marketing issues from a balanced perspective of theory and practice. On the theory side, we will draw on recent developments in research on Internet Marketing. On the practice side, real-world cases and practices will be used to systematically supplement the principles and theories introduced. Organizations need to get these issues right if they are to be successful with their electronic commerce applications.

[3] Class Delivery Method

To accomplish these objectives, the course material will be presented, and evaluations done through (1) Videos and Lectures, (2) In-class discussions/team assignments(depending on the number of students), (3) Case analysis, (4) Two Exams and (5) a short research paper. The lectures will tend to supplement and advance the required readings, in-class discussions, and case analysis.

It is the responsibility of the student to do the required readings and assignments prior to the class meeting.

Active participation is great part of your grade. You will get extra points by participating class action including

- (1) asking questions, (2) answering questions raised by the instructor, (3) responding to other student's comments, etc.
- (4) Bringing relevant articles or other materials to class that illustrate some of the things you have learned in the course. These articles or materials must be accompanied by a short, professionally written, summary (less than one page). Be sure to put your name in the top, right-hand corner, last name first.

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	10 %	0 %	10 %	0 %	0 %	0 %

④ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
40 %	0 %	50 %	0 %	0 %	0 %	10 %	0 %

[4] Grading Policies

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Mohammed et al.	Publisher	McGraw Hill	Textbook	Will be provided	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author	Chaffey et al.	Publisher	Prentice Hall	Textbook	Internet Marketing: Strategy, Implementation and Practice	Issued year	2010

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Marketing concept & Internet Marketing. Starting your own business
Second week	The Internet Marketing Introduction Preparation for business venture
Third week	Macro environment Part 1
Fourth week	Micro environment Part 2
Fifth week	Marketing Strategy Level 1
Sixth week	Internet and Marketing Mix Level 2
Seventh week	Marketing Mix II Level 3
Eighth week	Mid term Exam
Ninth week	Relationship Marketing Business Venture1
Tenth week	CRM Business Venture2
Eleventh week	Delivering Online Experience Pros and cons
Twelfth week	digital media P & C 2
Thirteenth week	Marketing Channels and Communication P & C 3
Fourteenth week	Channel Performance Evaluation 1
Fifteenth week	B 2 C Internet marketing Eval 2
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment	Case Presentation	submission date	2025-06-04 Wed
	purpose	You should choose a product or service company and by using the internet (principles of marketing) to elaborate and come up with resourceful insights.		
	procedure & notice	Will be explained during class session		
	references			
The second assignment	assignment	Research Paper	submission date	2025-06-04 Wed
	purpose	Your interested area such as investing stocks, real estate and anything related investment for your own guidance.		
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	INTERNET MARKETING	Course Number	JA06062002
Major / School Year	Division of Business Administration / 3	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 김영균	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number	8358718	A weekday / class /	[14-203:수(8B-9),목(8B-9)]
Office hours		lecture room	

[1] Outline / Purpose

By completing course requirements, you will be able to understand the marketing principles, strategies, and tactics associated with dominant Internet business models, the dynamics and taxonomy of business models and the elements of appraising business models. The course consists of nine independent yet interrelated modules. Based on the objectives explained above, these modules are developed to address key areas, including managerial functions (dynamics and taxonomy); finance (valuing and appraising) and marketing functions (product, price, position and promotion) ship management. All these issues should be examined in the context of the fast-changing new economy and knowledge-based society

[2] Course Learning Outcomes

This course will examine Internet Marketing issues from a balanced perspective of theory and practice. On the theory side, we will draw on recent developments in research on Internet Marketing. On the practice side, real-world cases and practices will be used to systematically supplement the principles and theories introduced. Organizations need to get these issues right if they are to be successful with their electronic commerce applications.

[3] Class Delivery Method

To accomplish these objectives, the course material will be presented, and evaluations done through (1) Videos and Lectures, (2) In-class discussions/team assignments(depending on the number of students), (3) Case analysis, (4) Two Exams and (5) a short research paper. The lectures will tend to supplement and advance the required readings, in-class discussions, and case analysis.

It is the responsibility of the student to do the required readings and assignments prior to the class meeting.

Active participation is great part of your grade. You will get extra points by participating class action including

(1) asking questions, (2) answering questions raised by the instructor, (3) responding to other student's comments, etc.

(4) Bringing relevant articles or other materials to class that illustrate some of the things you have learned in the course. These articles or materials must be accompanied by a short, professionally written, summary (less than one page). Be sure to put your name in the top, right-hand corner, last name first.

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	10 %	0 %	10 %	0 %	0 %	0 %

④ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
40 %	0 %	50 %	0 %	0 %	0 %	10 %	0 %

[4] Grading Policies

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Mohammed et al.	Publisher	McGraw Hill	Textbook	Will be provided	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author	Chaffey et al.	Publisher	Prentice Hall	Textbook	Internet Marketing: Strategy, Implementation and Practice	Issued year	2010

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Marketing concept & Internet Marketing. Starting your own business
Second week	The Internet Marketing Introduction Preparation for business venture
Third week	Macro environment Part 1
Fourth week	Micro environment Part 2
Fifth week	Marketing Strategy Level 1
Sixth week	Internet and Marketing Mix Level 2
Seventh week	Marketing Mix II Level 3
Eighth week	Mid term Exam
Ninth week	Relationship Marketing Business Venture1
Tenth week	CRM Business Venture2
Eleventh week	Delivering Online Experience Pros and cons
Twelfth week	digital media P & C 2
Thirteenth week	Marketing Channels and Communication P & C 3
Fourteenth week	Channel Performance Evaluation 1
Fifteenth week	B 2 C Internet marketing Eval 2
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment	Case Presentation	submission date	2025-06-04 Wed
	purpose	You should choose a product or service company and by using the internet (principles of marketing) to elaborate and come up with resourceful insights.		
	procedure & notice	Will be explained during class session		
	references			
The second assignment	assignment	Research Paper	submission date	2025-06-04 Wed
	purpose	Your interested area such as investing stocks, real estate and anything related investment for your own guidance.		
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			

	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	BUSINESS STRATEGY	Course Number	JA06028001
Major / School Year	Division of Business Administration / 4	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 박현준	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-103:금(2B-3)] [14-203:화(5B-6)]
Office hours			

[1] Outline / Purpose

This is an introductory course in strategic management. The course will provide fundamental concepts and frameworks for formulating and implementing strategy to create sustainable competitive advantages.

[2] Course Learning Outcomes

While giving you some analytical approaches that are useful to widely different strategic problems, the course will also enable you to develop an appreciation of strategy as an 'art' that is boldly inventive, necessarily uncertain, and often idiosyncratic. Both analytical ability and creativity will be awarded in the classroom as in real life. The functional skills acquired in earlier courses may be applied to problems that typically face the general manager. In preparing each case, you may be able to improve your strategic insight and knowledge by using the techniques learned throughout the lessons.

By the end of the course, you should be able to understand the managerial process of formulating a detailed, actionable strategy for a firm that recognizes the needs of the industry environment, build firm resources and capabilities to exploit them, and account for organizational resistance to change.

[3] Class Delivery Method

Each week the class lecture will cover the various fields in strategy. It will range from strategic leadership, strategy at the business and corporate level, corporate diversification, and more.

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	10 %	%	30 %	%	%	%	%

③ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	100 %	%	%	%	%	%

[4] Grading Policies

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Hill, Charles W. & Jones, Gareth R., and Schilling, Melissa A..	Publisher	South-Western Cengage Learning	Textbook	Strategic Management	Issued year	2015
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	장세진	Publisher	박영사	Textbook	경영전략 제8판	Issued year	2014 0901
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	[Offline] Course Introduction
Second week	[Offline] Case Guidance
Third week	[Online] Chapter 1: Strategic Leadership: Managing the Strategy Making Process (I)
Fourth week	[Offline] Chapter 1: Strategic Leadership: Managing the Strategy Making Process (II)
Fifth week	[Online] Chapter 2: Opportunities and Threats: Analyzing the External Environment
Sixth week	[Offline] Chapter 3: Competencies and Profitability: Analyzing the Internal Resources (I)
Seventh week	[Online] Chapter 3: Competencies and Profitability: Analyzing the Internal Resources (II)
Eighth week	Midterm
Ninth week	[Online] Chapter 5: Strategy at the Business Level (I)
Tenth week	[Offline] Chapter 5: Strategy at the Business Level (II)
Eleventh week	[Online] Chapter 9: Strategy at the Corporate Level
Twelfth week	[Offline] Chapter 10: Corporate Diversification Strategy
Thirteenth week	[Online] Chapter 11: Performance and Governance
Fourteenth week	[Online] Strategic Innovation
Fifteenth week	[Offline] Final Case Paper
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	BUSINESS STRATEGY	Course Number	JA06028002
Major / School Year	Division of Business Administration / 4	completion division /Grade evaluation	/
Department/Professor	Division of Business Administration / 박현준	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-103:금(4-5A)] [14-203:화(8B-9)]
Office hours			

[1] Outline / Purpose

This is an introductory course in strategic management. The course will provide fundamental concepts and frameworks for formulating and implementing strategy to create sustainable competitive advantages.

[2] Course Learning Outcomes

While giving you some analytical approaches that are useful to widely different strategic problems, the course will also enable you to develop an appreciation of strategy as an 'art' that is boldly inventive, necessarily uncertain, and often idiosyncratic. Both analytical ability and creativity will be awarded in the classroom as in real life. The functional skills acquired in earlier courses may be applied to problems that typically face the general manager. In preparing each case, you may be able to improve your strategic insight and knowledge by using the techniques learned throughout the lessons.

By the end of the course, you should be able to understand the managerial process of formulating a detailed, actionable strategy for a firm that recognizes the needs of the industry environment, build firm resources and capabilities to exploit them, and account for organizational resistance to change.

[3] Class Delivery Method

Each week the class lecture will cover the various fields in strategy. It will range from strategic leadership, strategy at the business and corporate level, corporate diversification, and more.

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	10 %	%	30 %	%	%	%	%

③ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	100 %	%	%	%	%	%

[4] Grading Policies

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Hill, Charles W. & Jones, Gareth R., and Schilling, Melissa A..	Publisher	South-Western Cengage Learning	Textbook	Strategic Management	Issued year	2015
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	장세진	Publisher	박영사	Textbook	경영전략 제8판	Issued year	2014 0901
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	[Offline] Course Introduction
Second week	[Offline] Case Guidance
Third week	[Online] Chapter 1: Strategic Leadership: Managing the Strategy Making Process (I)
Fourth week	[Offline] Chapter 1: Strategic Leadership: Managing the Strategy Making Process (II)
Fifth week	[Online] Chapter 2: Opportunities and Threats: Analyzing the External Environment
Sixth week	[Offline] Chapter 3: Competencies and Profitability: Analyzing the Internal Resources (I)
Seventh week	[Online] Chapter 3: Competencies and Profitability: Analyzing the Internal Resources (II)
Eighth week	Midterm
Ninth week	[Online] Chapter 5: Strategy at the Business Level (I)
Tenth week	[Offline] Chapter 5: Strategy at the Business Level (II)
Eleventh week	[Online] Chapter 9: Strategy at the Corporate Level
Twelfth week	[Offline] Chapter 10: Corporate Diversification Strategy
Thirteenth week	[Online] Chapter 11: Performance and Governance
Fourteenth week	[Online] Strategic Innovation
Fifteenth week	[Offline] Final Case Paper
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Principles of Management	Course Number	0001296001
Major / School Year	Dept. of Tax & Accounting / 1	completion division / Grade evaluation	/
Department/Professor	Division of Business Administration / 박현준	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[29-208:월(8B-9),수(8B-9)]
Office hours		lecture room	

[1] Outline / Purpose

This is an introductory course in management. The course will provide fundamental concepts and frameworks for formulating implementing and understanding management to provide basic frameworks for the actual world of business.

While giving you some analytical approaches that are useful to widely different problems in the business world, the course will also enable you to develop an appreciation of management. Both analytical ability and creativity will be awarded in the classroom as in real life.

The functional skills acquired in earlier courses may be applied to problems that typically face the general manager. In preparing each chapter, you may be able to improve your management insights and knowledge by using the techniques learned throughout the lessons.

[2] Course Learning Outcomes

By the end of the course, you should be able to understand: fundamental concepts and principles of management, including the basic roles, skills, and functions of management, theoretical aspects and practice application of managerial process, familiar with interactions between the environment, and the ethical dilemmas faced by managers, and the social responsibilities of business.

[3] Class Delivery Method

Each week the class lecture will cover the various fields in the management world. It will range from globalization, production, organizational culture, strategy, and more.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	%	20 %	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	100 %	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Gulati, Ranjay, Mayo, Anthony J., & Nohria, Nitin	Publisher	Cengage Learning	Textbook	Management	Issued year	2014
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course introduction
Second week	Chapter 1: Introduction to Management
Third week	Chapter 2: The Global Business Environment
Fourth week	Chapter 3: Ethics and Corporate Social Responsibility
Fifth week	Chapter 4: Introduction to Strategy
Sixth week	Chapter 5: Business–Level Strategy (I)
Seventh week	Chapter 6: Corporate–Level Strategy
Eighth week	Midterm
Ninth week	Chapter 8: Organizational Culture
Tenth week	Chapter 10: Performance Management
Eleventh week	Chapter 13: Becoming a Leader: Knowing Yourself
Twelfth week	Chapter 14: Motivation
Thirteenth week	Final Group Case Presentation
Fourteenth week	Final Group Case Presentation
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Advanced Managerial Accounting	Course Number	0001555001
Major / School Year	Dept. of Tax & Accounting / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Tax & Accounting /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[29-207:수(1-2A)(2B-3)]
Office hours			

[1] Outline / Purpose

This course is designed to help students understand advanced cost accounting issues and apply those understandings to real world decision makings. It also covers review for the tests of professional certificates.

[2] Course Learning Outcomes

The aims of this course are:

- (1) to understand advanced cost accounting issues,
- (2) to apply those understandings to real world decision makings, and
- (3) to prepare for the tests of professional certificates.

[3] Class Delivery Method

This course consists of lectures, problem solvings, case discussions, and class presentations.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	20 %	%	%	10 %	10 %	%	10 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	%	%	%	%	%	50 %	20 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Horngren등	Publisher	Pearson Education	Textbook	Cost Accounting – A Managerial Emphasis (14E)	Issued year	2012
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Orientation
Second week	Ch1 The Manager and Management Accounting
Third week	Ch2 An Introduction to Cost Terms and Purposes
Fourth week	Ch4 Job Costing
Fifth week	Ch17 Process Costing
Sixth week	Class Presentations
Seventh week	Class Presentations
Eighth week	Mid-term
Ninth week	Ch16 Cost Allocation: Joint Products and Byproducts
Tenth week	Ch15 Allocation of Support-Department Costs, Common Costs, and Revenues
Eleventh week	Ch5 Activity-Based Costing and Activity-Based Management
Twelfth week	Ch10 Determining How Costs Behave
Thirteenth week	Ch9 Inventory Costing and Capacity Analysis
Fourteenth week	Class Presentations
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	To be announced	submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Basic Product Design	Course Number	0005987001
Major / School Year	Division of Design / 2	completion division / Grade evaluation	/
Department/Professor	Division of Design / 안혜신	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class /	[28-402:화(4)(5)(6)]
Office hours		lecture room	

[1] Outline / Purpose

Fundamental product design is an introduction to the basic elements of product design.

Lecture covers the definitions, critical reviews of passages, emerging issues of product design and materials and structure of products.

Students investigate basic scientific epistemology in connection with the design history, cultural design sociology, and cases. Special emphasis is placed on applied methods of the social aesthetics, ethics and science for envisioning the future design.

[2] Course Learning Outcomes

Through this course students examine the profiles of the key designers/ design movements/design companies of each era and also study emerging design issues. We will look into application of materials and structure for products.

[3] Class Delivery Method

The course consists of lectures about product design theories and projects focused on materials and structure.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	10 %	0 %	50 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher	안그라픽스	Textbook	How things are made	Issued year	
(2)	Author		Publisher	도서출판 국제	Textbook	디자인재료/ mock-up 제작기법	Issued year	
(3)	Author		Publisher	태학원	Textbook	재료와 가공	Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	01. Course Introduction: Fundamental product design
Second week	02. What is product design / Design in industry and commerce What is product design? Difference between Art and Design Design's contributions to success The power of design Category of Design
Third week	03. Designing the experience Watching design documentary 'Objectified' **Assignment
Fourth week	04. Multinational /global design company – design identity / philosophy – design success
Fifth week	05. Product design elements: Aesthetics & Functionality – Aesthetic appeal / Emotional appeal Use value and Usability / Ergonomics / Safety – Case study
Sixth week	06. Product design elements: Materials & Responsibility – Product design and materials Production efficiency / Universal design – Case study
Seventh week	07. Materials and Structure
Eighth week	08. Project: Observe I – Observing and analyzing target item
Ninth week	09. Project: Observe II – Analyzing user, function and structure of target item
Tenth week	10. Project: Visualization I (design concept) – Design concept – 2D/3D idea sketch
Eleventh week	11. Project: Visualization I (idea sketch) – 2D/3D idea sketch
Twelfth week	12. Project: Visualization I (idea sketch/rough rendering) – 2D/3D idea sketch
Thirteenth week	13. Project: Production I (mock-up)
Fourteenth week	14. Project: Production I (mock-up)
Fifteenth week	15. Final Presentation Final Presentation of Project
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	
	purpose			

The third assignment		
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Basic Product Design	Course Number	0005987002
Major / School Year	Division of Design / 2	completion division / Grade evaluation	/
Department/Professor	Division of Design / 안혜신	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class /	[28-402:수(7)(8)(9)]
Office hours		lecture room	

[1] Outline / Purpose

Fundamental product design is an introduction to the basic elements of product design.

Lecture covers the definitions, critical reviews of passages, emerging issues of product design and materials and structure of products.

Students investigate basic scientific epistemology in connection with the design history, cultural design sociology, and cases. Special emphasis is placed on applied methods of the social aesthetics, ethics and science for envisioning the future design.

[2] Course Learning Outcomes

Through this course students examine the profiles of the key designers/ design movements/design companies of each era and also study emerging design issues. We will look into application of materials and structure for products.

[3] Class Delivery Method

The course consists of lectures about product design theories and projects focused on materials and structure.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	10 %	0 %	50 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher	안그라픽스	Textbook	How things are made	Issued year	
(2)	Author		Publisher	도서출판 국제	Textbook	디자인재료/ mock-up 제작기법	Issued year	
(3)	Author		Publisher	태학원	Textbook	재료와 가공	Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	01. Course Introduction: Fundamental product design
Second week	02. What is product design / Design in industry and commerce What is product design? Difference between Art and Design Design's contributions to success The power of design Category of Design
Third week	03. Designing the experience Watching design documentary 'Objectified' **Assignment
Fourth week	04. Multinational /global design company – design identity / philosophy – design success
Fifth week	05. Product design elements: Aesthetics & Functionality – Aesthetic appeal / Emotional appeal Use value and Usability / Ergonomics / Safety – Case study
Sixth week	06. Product design elements: Materials & Responsibility – Product design and materials Production efficiency / Universal design – Case study
Seventh week	07. Materials and Structure
Eighth week	08. Project: Observe I – Observing and analyzing target item
Ninth week	09. Project: Observe II – Analyzing user, function and structure of target item
Tenth week	10. Project: Visualization I (design concept) – Design concept – 2D/3D idea sketch
Eleventh week	11. Project: Visualization I (idea sketch) – 2D/3D idea sketch
Twelfth week	12. Project: Visualization I (idea sketch/rough rendering) – 2D/3D idea sketch
Thirteenth week	13. Project: Production I (mock-up)
Fourteenth week	14. Project: Production I (mock-up)
Fifteenth week	15. Final Presentation Final Presentation of Project
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	
	purpose			

The third assignment		
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Design Embodiment Programming	Course Number	0010988001
Major / School Year	Division of Design / 2	completion division / Grade evaluation	/
Department/Professor	Division of Design / 박동명	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[28-404A:수(7)(8)(9)]
Office hours			

[1] Outline / Purpose

To cultivate the basic level of C language programming(coding) competency

[2] Course Learning Outcomes

To cultivate the basic level of C language programming(coding) competency

- 1) To relieve the fear of computer programming(coding)
- 2) To build a foundation for cultivating Arduino competency to manufacture working products
- 3) To build a foundation for cultivating other computer programming languages(e.g., Java, Python, etc.)

[3] Class Delivery Method

- 1) To understand concepts
- 2) To understand examples
- 3) To practice examples
- 4) To apply examples

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	50 %	0 %	0 %	0 %	50 %	0 %

[4] Grading Policies

Midterm Exam: 30%

Final Exam: 60%

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Dongmyung Park	Publisher		Textbook	Sharing Platform Slides	Issued year	2024
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Basic C 1
Third week	Basic C 2
Fourth week	Basic C 3
Fifth week	Basic C 4
Sixth week	Basic C 5
Seventh week	Basic C 6
Eighth week	Basic C 7
Ninth week	Basic C 8
Tenth week	Basic C 9
Eleventh week	Basic C 10
Twelfth week	Basic C 11
Thirteenth week	Basic C 12
Fourteenth week	Basic C 13
Fifteenth week	Basic C 15
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Design Embodiment Programming	Course Number	0010988002
Major / School Year	Division of Design / 2	completion division / Grade evaluation	/
Department/Professor	Division of Design / 박동명	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[28-404A:수(4)(5)(6)]
Office hours			

[1] Outline / Purpose

To cultivate the basic level of C language programming(coding) competency

[2] Course Learning Outcomes

To cultivate the basic level of C language programming(coding) competency

- 1) To relieve the fear of computer programming(coding)
- 2) To build a foundation for cultivating Arduino competency to manufacture working products
- 3) To build a foundation for cultivating other computer programming languages(e.g., Java, Python, etc.)

[3] Class Delivery Method

- 1) To understand concepts
- 2) To understand examples
- 3) To practice examples
- 4) To apply examples

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	50 %	0 %	0 %	0 %	50 %	0 %

[4] Grading Policies

Midterm Exam: 30%

Final Exam: 60%

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Dongmyung Park	Publisher		Textbook	Sharing Platform Slides	Issued year	2024
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Basic C 1
Third week	Basic C 2
Fourth week	Basic C 3
Fifth week	Basic C 4
Sixth week	Basic C 5
Seventh week	Basic C 6
Eighth week	Basic C 7
Ninth week	Basic C 8
Tenth week	Basic C 9
Eleventh week	Basic C 10
Twelfth week	Basic C 11
Thirteenth week	Basic C 12
Fourteenth week	Basic C 13
Fifteenth week	Basic C 14
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Data driven Product Design	Course Number	0010587001
Major / School Year	Division of Design / 3	completion division / Grade evaluation	/
Department/Professor	Division of Design / 박동명	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class /	[28-204:월(4)(5)(6)]
Office hours		lecture room	

[1] Outline / Purpose

On the basis of understanding and practicing product development methodology (product development concept, process, method & tool), students demonstrate an advanced level of product development.

[2] Course Learning Outcomes

- 1) To demonstrate the advanced level of product development in understanding product development methodology (product development concept, process, method & tool).
- 2) To demonstrate the advanced level of product development in practicing product development methodology (product development concept, process, method & tool).
- 3) To demonstrate the advanced level of product development for a target product.

[3] Class Delivery Method

- 1) To understand a theory & knowledge
- 2) To understand examples
- 3) To apply the theory & knowledge → Tasks

④ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %

⑤ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

- 1) Midterm Assignment: 30%
- 2) Final Assignment: 60%

Product Design Process

- Stage 0: Preliminary Research: 5%
- Stage 1: Opportunity Identification – Design Problem: 30%
- Stage 2: Idea Generation – Design Solution: 30: %
- Stage 3: Requirements List: 5%
- Stage 4: Concept Design & Design Optimisation: 30%

④ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Dongmyung Park	Publisher		Textbook	PowerPoint Slides & Tool Box	Issued year	2024
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Introduction – Course Structure, Course Proceeding & Project (Assignment) Product Development Concept, Process & Approach
Second week	Stage 0: Preliminary Research
Third week	Stage 1 (Opportunity Identification) – Market-driven 1 Design
Fourth week	Stage 1 (Opportunity Identification) – User-driven Design
Fifth week	Stage 1 (Opportunity Identification) – Aesthetic-driven Design
Sixth week	Stage 1 (Opportunity Identification) – Engineering-driven Design
Seventh week	Stage 1 (Opportunity Identification) – Market-driven 2 Design – Concurrent Collaborative Design
Eighth week	Stage 2 (Idea Generation) – User-driven Design
Ninth week	Stage 2 (Idea Generation) – Aesthetic-driven Design
Tenth week	Stage 2 (Idea Generation) – Aesthetic-driven Design
Eleventh week	Stage 2 (Idea Generation) – Engineering-driven Design
	Stage 2 (Idea Generation) – Market-driven 2 Design
	Stage 2 (Idea Generation) – Concurrent Collaborative Design
Twelfth week	Stage 3 (Requirements List)
Thirteenth week	Stage 4 (Concept Design & Design Optimisation)
Fourteenth week	Stage 4 (Concept Design & Design Optimisation)
Fifteenth week	Stage 4 (Concept Design & Design Optimisation)
Sixteenth week	Stage 4 (Concept Design & Design Optimisation)

[7] Assignments

The first assignment	assignment	An Advanced Level of Product Design	submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The third assignment	purpose	
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Functional Anatomy	Course Number	0009814001
Major / School Year	Division of Health and Kinesiology / 2	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology / 고주필	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[16-302:월(1-2A),수(2B-3)]
Office hours			

[1] Outline / Purpose

This course presents a systemic approach to the study of the human body. Lecture presentation begins with an introduction of anatomical terminology and an overview of cellular process and tissue classification. This course also covers the functional human musculoskeletal anatomy. Bone & joint function (e.g., osteokinematics and arthrokinematics) and muscle function (e.g., origin, insertion, innervation, and action) will be discussed.

[2] Course Learning Outcomes

The course will include discussion of the musculoskeletal anatomy, how humans move and its effects on injury and impairments. This advanced course in human anatomy investigates the regional, functional anatomy of the muscular system. Students will investigate the detailed anatomy of the major joints of the body, nervous system, and vascular system as they pertain to the skeletal muscles.

[3] Class Delivery Method

Lecture base

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Joseph E. Muscolino	Publisher		Textbook	기능해부학 (근육, 뼈대, 촉진법); Know the Body (Muscle, Bone, and Palpation Essentials)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation & Pre-class test / Introduction
Second week	Review Basic Functional Anatomy & Lower Extremity Musculoskeletal Anatomy
Third week	Lower Extremity Musculoskeletal Anatomy
Fourth week	Exam#1
Fifth week	Lower Extremity Musculoskeletal Anatomy
Sixth week	Lower Extremity Musculoskeletal Anatomy
Seventh week	Lower Extremity Musculoskeletal Anatomy
Eighth week	Exam#2
Ninth week	Upper Extremity Musculoskeletal Anatomy
Tenth week	Upper Extremity Musculoskeletal Anatomy
Eleventh week	Upper Extremity Musculoskeletal Anatomy
Twelfth week	Exam#3
Thirteenth week	Trunk(spine) and Nerve
Fourteenth week	Trunk(spine) and Nerve
Fifteenth week	Trunk(spine) and Nerve
Sixteenth week	Final Exam (Comprehensive)

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Functional Anatomy	Course Number	0009814002
Major / School Year	Division of Health and Kinesiology / 2	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology / 고주필	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[16-302:월(2B-3),수(1-2A)]
Office hours			

[1] Outline / Purpose

This course presents a systemic approach to the study of the human body. Lecture presentation begins with an introduction of anatomical terminology and an overview of cellular process and tissue classification. This course also covers the functional human musculoskeletal anatomy. Bone & joint function (e.g., osteokinematics and arthrokinematics) and muscle function (e.g., origin, insertion, innervation, and action) will be discussed.

[2] Course Learning Outcomes

The course will include discussion of the musculoskeletal anatomy, how humans move and its effects on injury and impairments. This advanced course in human anatomy investigates the regional, functional anatomy of the muscular system. Students will investigate the detailed anatomy of the major joints of the body, nervous system, and vascular system as they pertain to the skeletal muscles.

[3] Class Delivery Method

Lecture base

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Joseph E. Muscolino	Publisher		Textbook	기능해부학 (근육, 뼈대, 촉진법); Know the Body (Muscle, Bone, and Palpation Essentials)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation & Pre-class test / Introduction
Second week	Review Basic Functional Anatomy & Lower Extremity Musculoskeletal Anatomy
Third week	Lower Extremity Musculoskeletal Anatomy
Fourth week	Exam#1
Fifth week	Lower Extremity Musculoskeletal Anatomy
Sixth week	Lower Extremity Musculoskeletal Anatomy
Seventh week	Lower Extremity Musculoskeletal Anatomy
Eighth week	Exam#2
Ninth week	Upper Extremity Musculoskeletal Anatomy
Tenth week	Upper Extremity Musculoskeletal Anatomy
Eleventh week	Upper Extremity Musculoskeletal Anatomy
Twelfth week	Exam#3
Thirteenth week	Trunk(spine) and Nerve
Fourteenth week	Trunk(spine) and Nerve
Fifteenth week	Trunk(spine) and Nerve
Sixteenth week	Final Exam (Comprehensive)

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Sports Climbing	Course Number	0006966001
Major / School Year	Division of Health and Kinesiology / 2	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology /	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[ZZ-199:수(5)(6)]
Office hours			

[1] Outline / Purpose

스포츠클라이밍은 전통적인 자연암벽등반을 스포츠화한 것으로 도심에 구성된 인공암벽 루트에 규칙을 적용해 오르는 스포츠이다. 현대사회에서 요구하는 스포츠적 요소를 갖춰 점점 저변인구가 확대되고 있는 스포츠클라이밍을 인지적, 심동적, 정의적 영역에서 학습한다.

[2] Course Learning Outcomes

스포츠클라이밍을 체험하면서 도전정신을 향상시키고 신체적, 심리적 트레이닝을 통한 실력향상의 효과와 성취감을 느낀다. 동반자와 확보자의 역할을 배우며 협동심과 의사소통 능력을 진작 시키고 파트너쉽을 이해하며 스포츠 안전 관리의 기초를 이해한다.

[3] Class Delivery Method

이 수업은 이론 강의를 시작으로하여 실외 인공암벽장에서 현장수업을 위주로 실기가 이루어진다. 주차별 학습 진도에 따라 목표를 설정하고 안전기술 습득을 바탕으로 학기말 실습 및 테스트를 실시한다.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	국립등산학교	Publisher		Textbook	국립등산학교 표준등산교재	Issued year	2024
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	오리엔테이션 Orientation
Second week	등반의 역사, 스포츠킨라이밍의 발전 History and evolution of climbing
Third week	스포츠클라이밍 장비, 준비물 Sportclimbing equipment
Fourth week	스포츠클라이밍 이동과 기술, 기본 무브 Sportclimbing movement and techniques Basic movement
Fifth week	스포츠클라이밍 이동과 기술, 그립법, 풋워크 Sports climbing movements and techniques Grip techniques, Footwork
Sixth week	톱로프 클라이밍 시스템 1, 빌레이, 파트너십 Top rope climbing system 1 Belay, Partnership
Seventh week	톱로프 클라이밍 시스템 2, 매듭법 Top rope climbing system 2 Climbing knot
Eighth week	중간고사 이론 테스트
Ninth week	톱로프 클라이밍 시스템 3, 정적 무브 Top rope climbing system 3 Static move
Tenth week	톱로프 클라이밍 시스템 4, 동적 무브 Top rope climbing system 4 Dynamic move
Eleventh week	리드 클라이밍 시스템 1, 클리핑 Lead climbing system 1 Clipping
Twelfth week	리드 클라이밍 시스템 2, 리드 빌레이 Lead climbing system 2 Lead belay
Thirteenth week	볼더링 라운드 1 Bouldering Round 1
Fourteenth week	볼더링 라운드 2 Bouldering Round 2
Fifteenth week	기말고사 실기 테스트
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Sports Climbing	Course Number	0006966002
Major / School Year	Division of Health and Kinesiology / 2	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology /	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class / lecture room	[ZZ-199:수(3)(4)]
Office hours			

[1] Outline / Purpose

스포츠클라이밍은 전통적인 자연암벽등반을 스포츠화한 것으로 도심에 구성된 인공암벽 루트에 규칙을 적용해 오르는 스포츠이다. 현대사회에서 요구하는 스포츠적 요소를 갖춰 점점 저변인구가 확대되고 있는 스포츠클라이밍을 인지적, 심동적, 정의적 영역에서 학습한다.

[2] Course Learning Outcomes

스포츠클라이밍을 체험하면서 도전정신을 향상시키고 신체적, 심리적 트레이닝을 통한 실력향상의 효과와 성취감을 느낀다. 동반자와 확보자의 역할을 배우며 협동심과 의사소통 능력을 진작 시키고 파트너쉽을 이해하며 스포츠 안전 관리의 기초를 이해한다.

[3] Class Delivery Method

이 수업은 이론 강의를 시작으로하여 실외 인공암벽장에서 현장수업을 위주로 실기가 이루어진다. 주차별 학습 진도에 따라 목표를 설정하고 안전기술 습득을 바탕으로 학기말 실습 및 테스트를 실시한다.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	국립등산학교	Publisher		Textbook	국립등산학교 표준등산교재	Issued year	2024
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	오리엔테이션 Orientation
Second week	등반의 역사, 스포츠클라이밍의 발전 History and evolution of climbing
Third week	스포츠클라이밍 장비, 준비물 Sportclimbing equipment
Fourth week	스포츠클라이밍 이동과 기술, 기본 무브 Sportclimbing movement and techniques Basic movement
Fifth week	스포츠클라이밍 이동과 기술, 그립법, 풋워크 Sports climbing movements and techniques Grip techniques, Footwork
Sixth week	톱로프 클라이밍 시스템 1, 빌레이, 파트너십 Top rope climbing system 1 Belay, Partnership
Seventh week	톱로프 클라이밍 시스템 2, 매듭법 Top rope climbing system 2 Climbing knot
Eighth week	중간고사 이론 테스트
Ninth week	톱로프 클라이밍 시스템 3, 정적 무브 Top rope climbing system 3 Static move
Tenth week	톱로프 클라이밍 시스템 4, 동적 무브 Top rope climbing system 4 Dynamic move
Eleventh week	리드 클라이밍 시스템 1, 클리핑 Lead climbing system 1 Clipping
Twelfth week	리드 클라이밍 시스템 2, 리드 빌레이 Lead climbing system 2 Lead belay
Thirteenth week	볼더링 라운드 1 Bouldering Round 1
Fourteenth week	볼더링 라운드 2 Bouldering Round 2
Fifteenth week	기말고사 실기 테스트
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Orthopedic Evaluation and Assessment of the Lower Extremity	Course Number	0011087001
Major / School Year	Division of Health and Kinesiology / 3	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology / 고주필	Grades/Lecture/ Practice	2 / 2 / 0
Phone Number		A weekday / class / lecture room	[16-302:화(5)(6)]
Office hours			

[1] Outline / Purpose

On-site and clinical assessment of lower extremity injuries, proper referral, and an understanding of diagnostic equipment utilized in the medical field are included. Critical thinking in realistic scenarios is emphasized.

[2] Course Learning Outcomes

Each student will demonstrate an understanding of the anatomical nomenclature, injury classifications, the evaluation process, and evaluation documentation. Each student will demonstrate the ability to evaluate range of motion, muscle strength, and neurological status of the lower extremity as measured on written examinations and oral practical evaluations.

[3] Class Delivery Method

Practical laboratory, and Lectures

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation & Pre-class test / Introduction
Second week	Injury Evaluation Process
Third week	Injury Evaluation Process
Fourth week	Injury Nomenclature
Fifth week	Injury Nomenclature
Sixth week	Exam#1
Seventh week	Assessment of Posture
Eighth week	Assessment of Posture
Ninth week	Foot and Ankle
Tenth week	Foot and Ankle
Eleventh week	Exam
Twelfth week	Knee
Thirteenth week	Knee
Fourteenth week	Hip
Fifteenth week	Hip
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Orthopedic Evaluation and Assessment of the Lower Extremity	Course Number	0011087002
Major / School Year	Division of Health and Kinesiology / 3	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology / 고주필	Grades/Lecture/ Practice	2 / 2 / 0
Phone Number		A weekday / class / lecture room	[16-302:목(5)(6)]
Office hours			

[1] Outline / Purpose

On-site and clinical assessment of lower extremity injuries, proper referral, and an understanding of diagnostic equipment utilized in the medical field are included. Critical thinking in realistic scenarios is emphasized.

[2] Course Learning Outcomes

Each student will demonstrate an understanding of the anatomical nomenclature, injury classifications, the evaluation process, and evaluation documentation. Each student will demonstrate the ability to evaluate range of motion, muscle strength, and neurological status of the lower extremity as measured on written examinations and oral practical evaluations.

[3] Class Delivery Method

Practical laboratory, and Lectures

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation & Pre-class test / Introduction
Second week	Injury Evaluation Process
Third week	Injury Evaluation Process
Fourth week	Injury Nomenclature
Fifth week	Injury Nomenclature
Sixth week	Exam#1
Seventh week	Assessment of Posture
Eighth week	Assessment of Posture
Ninth week	Foot and Ankle
Tenth week	Foot and Ankle
Eleventh week	Exam
Twelfth week	Knee
Thirteenth week	Knee
Fourteenth week	Hip
Fifteenth week	Hip
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Exercise Nutrition	Course Number	0002142001
Major / School Year	Division of Health and Kinesiology / 3	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology / 윤동현	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[16-302:금(1-2A)(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

The study of sports dietetics involves suggesting a suitable diet to an individual in order to maximize one's physical activity. In this course, we will begin with an acquisition of a basic knowledge of nutrition, vitamins, and minerals. We will further our studies to areas that concern a well-balanced diet. We will also study how energy is created through regulated consumption and how this energy is dispersed. Through this course, we will explore how sports dietetics encourages the development of a healthy diet that will enhance one's physical performance. To present the basic biochemistry that a student of exercise science would need to understand exercise at the molecular level and to enable him or her to read and understand the most recent journal articles.

[2] Course Learning Outcomes

1. To be familiarized with key concept of exercise metabolism.
2. To study energy production through the oxidation of carbohydrates, fat, and protein.
3. To study ergogenic aids to increase skeletal muscle function.
4. To practice oral presentation on published research articles

[3] Class Delivery Method

1. Study materials will be provided on a weekly basis
2. Published articles (PubMed).

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Melvin H. Williams	Publisher	Mc Graw Hill Education,	Textbook	NUTRITION for health, fitness, and sports (eleven edition).	Issued year	2018
(2)	Author	John Ivy	Publisher	Basic Health Publications,	Textbook	Nutrition Timing System	Issued year	2004
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation
Second week	Introduction to Nutrition for Health, Fitness and Sports Performance
Third week	Human Energy
Fourth week	Body composition and nutrition
Fifth week	Carbohydrates: The Main Energy Food
Sixth week	Fat: An Important Energy Source during Exercise
Seventh week	Midterm-Exam
Eighth week	Protein: The Tissue Builder
Ninth week	Vitamins, Minerals
Tenth week	Weight Maintenance, Loss and Weight Gain
Eleventh week	Nutrient timing system
Twelfth week	Team presentation (Group A)
Thirteenth week	Team presentation (Group B)
Fourteenth week	Team presentation (Group C)
Fifteenth week	Final-exam
Sixteenth week	보강주간

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Sports English 1	Course Number	0011962001
Major / School Year	Division of Health and Kinesiology / 4	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology / 성호준	Grades/Lecture/Practice	2 / 2 / 0
Phone Number		A weekday / class / lecture room	[16-311:월(7)(8)]
Office hours			

[1] Outline / Purpose

스포츠의 세계화에 따른 스포츠와 연관된 산업 및 비즈니스에서 사용하는 다양한 영어를 습득하여 국제 스포츠계를 대비한다.

[2] Course Learning Outcomes

본 수업은 스포츠와 관련된 영어를 학습하고 기초적인 이해를 목표로 한다.

[3] Class Delivery Method

대면 수업

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	오리엔테이션
Second week	영상을 통한 스포츠 영어 학습
Third week	영상을 통한 스포츠 영어 학습
Fourth week	영상을 통한 스포츠 영어 학습
Fifth week	영상을 통한 스포츠 영어 학습
Sixth week	영상을 통한 스포츠 영어 학습
Seventh week	영상을 통한 스포츠 영어 학습
Eighth week	중간고사
Ninth week	영상을 통한 스포츠 영어 학습
Tenth week	영상을 통한 스포츠 영어 학습
Eleventh week	영상을 통한 스포츠 영어 학습
Twelfth week	영상을 통한 스포츠 영어 학습
Thirteenth week	영상을 통한 스포츠 영어 학습
Fourteenth week	영상을 통한 스포츠 영어 학습
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Exercise Rehabilitation	Course Number	HFC6080001
Major / School Year	Division of Health and Kinesiology / 4	completion division /Grade evaluation	/
Department/Professor	Division of Health and Kinesiology / 김남웅	Grades/Lecture/ Practice	2 / 2 / 0
Phone Number		A weekday / class /	[16-313A:월(2)(3)]
Office hours		lecture room	

[1] Outline / Purpose

This lecture-laboratory course provides an introduction to the rehabilitation of orthopedic injuries. Students will develop the knowledge, skills, and critical thinking abilities needed to assess injuries, illnesses, and conditions in physically active individuals. The course emphasizes selecting appropriate treatment, rehabilitation, and reconditioning strategies while considering anatomical, physiological, biomechanical, psychosocial, and community factors.

[2] Course Learning Outcomes

Evidence-Based Practice: Students will evaluate the effectiveness of training interventions using evidence-based principles and understand various clinical outcomes assessments.

Therapeutic Interventions & Rehabilitation Techniques: Students will design, implement, and adjust therapeutic interventions based on patient needs, ensuring proper positioning, instruction, and progression while considering contraindications and expected physiological responses.

[3] Class Delivery Method

Lecture and laboratory

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	10 %	0 %	40 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	70 %	0 %	0 %	0 %	0 %	30 %

[4] Grading Policies

The course grading scheme includes two written exams(40%), one practical exam(20%), and assignments(20%).

Make-up exams will only be given with the explicit consent of the instructor and arrangements must be made at least 48 hours before the scheduled exam.

Exceptions will be granted solely at the instructor's discretion.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	William E. Prentice	Publisher	Routledge	Textbook	Rehabilitation Techniques for Sports Medicine and Athletic Training	Issued year	2020
(2)	Author	Peggy A. Houglum	Publisher	Human Kinetics	Textbook	Therapeutic Exercise for Musculoskeletal Injuries	Issued year	2016
(3)	Author	S. Brent Brotzman	Publisher	Mosby	Textbook	Clinical Orthopaedic Rehabilitation	Issued year	2011

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Posted articles, chapters, and other resources on INU LMS (<https://cyber.inu.ac.kr>)

[6] Weekly lesson plans

First week	Orientation
Second week	The Basis of Injury Rehabilitation
Third week	The Basis of Injury Rehabilitation
Fourth week	The Basis of Injury Rehabilitation
Fifth week	Achieving the Goals of Rehabilitation
Sixth week	Achieving the Goals of Rehabilitation
Seventh week	Achieving the Goals of Rehabilitation
Eighth week	Midterm
Ninth week	The Tools of Rehabilitation
Tenth week	The Tools of Rehabilitation
Eleventh week	Rehabilitation Techniques for Specific Injuries
Twelfth week	Rehabilitation Techniques for Specific Injuries
Thirteenth week	Rehabilitation Techniques for Specific Injuries
Fourteenth week	Rehabilitation Techniques for Specific Injuries
Fifteenth week	Rehabilitation Techniques for Specific Injuries
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH CONVERSATION	Course Number	0003142001
Major / School Year	Dept. of English Language Education / 1	completion division / Grade evaluation	/
Department/Professor	Institute of General Education / 매튜	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[NC-208:월(3)(4)(5)]
Office hours			

[1] Outline / Purpose

To teach basic English conversation while also providing opportunities for students to teach the class.

[2] Course Learning Outcomes

By the end of the course students should be able to teach a basic grammar point and prepare a basic lesson plan.

[3] Class Delivery Method

The class will be delivered using slides and text books. It is expected that students participate by talking to their peers and to the class when required.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
40 %	20 %	0 %	20 %	0 %	20 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	70 %	0 %	0 %	10 %	0 %	0 %

[4] Grading Policies

Participation will be based on attendance and speaking in class. Coming prepared for your teachback will also contribute towards this grade.

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	Cambridge	Textbook	Touchstone 3	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Handouts will also be provided

[6] Weekly lesson plans

First week	Introduction to syllabus Make Kakaotalk groups
Second week	Unit 2: Past experiences Go over teachbacks
Third week	Unit 3: wonders of the world. Teachback 1 (page 23)
Fourth week	Unit 4 (Family Life) Teachback 2 (page 37)
Fifth week	Unit 7: Relationships Teachback 3 (page 57)
Sixth week	Unit 8: What if? Teachback 4 (page 77)
Seventh week	Speaking exam practice sign up for midterm exam
Eighth week	Midterm exam
Ninth week	Unit 9: Teach savvy? Teachback 5 (page 87)
Tenth week	Unit 10: What's up? Teachback 6 (page 99)
Eleventh week	Unit 11: Impressions Teachback 7 (page 109)
Twelfth week	Unit 12: the news teachback 8 (page 119)
Thirteenth week	Written test
Fourteenth week	Speaking exam practice Sign up for the final exam
Fifteenth week	final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	midterm test	submission date	2025-04-21 Mon
	purpose	to evaluate the speaking of a student		
	procedure & notice	one to one in class		
	references			
The second assignment	assignment	written test	submission date	2025-05-26 Mon
	purpose	To evaluate the uptake of grammar		
	procedure & notice	Paper test in class		
	references			
The third assignment	assignment	final test	submission date	2025-06-09 Mon
	purpose	to evaluate the speaking of a student		
	procedure & notice	one to one in class		
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Basic Composition	Course Number	0006785001
Major / School Year	Dept. of English Language Education / 1	completion division /Grade evaluation	/
Department/Professor	Dept. of English Language Education / 김정수	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[NC-209:월(1-2A),수(1-2A)]
Office hours	TBA	lecture room	

[1] Outline / Purpose

This course, designed for first-year students majoring in English Language Education, introduces the fundamental principles and practices of academic writing. The course emphasizes the development of essential skills for producing clear, coherent, and well-structured academic texts. Key aspects of academic writing, including paragraph structure, thesis statements, argumentation, referencing, and academic vocabulary, will be explored. In addition, students will learn strategies to avoid plagiarism and enhance clarity and coherence in their writing. Furthermore, the course integrates the use of Artificial Intelligence Digital Textbooks (AIDTs) to better prepare students as future English teachers in Korea, with a particular emphasis on academic writing skills. Using AIDTs, students will also have opportunities to make micro-teaching presentations.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

- Understand the structure and conventions of academic writing, including paragraph and essay organization.
- Develop clear and concise thesis statements, supported by logical arguments and evidence.
- Use appropriate academic vocabulary and language structures to express ideas effectively.
- Apply proper citation and referencing techniques to maintain academic integrity.
- Revise and edit their own writing to improve clarity, coherence, and grammatical accuracy.
- Identify and produce common types of academic writing, such as argumentative essays, descriptive reports, and compare-and-contrast essays.
- Build confidence in writing for academic and professional purposes in English.
- Utilize key functions of Artificial Intelligence Digital Textbooks (AIDTs) to enhance their academic writing skills and to prepare their roles as future English teachers in Korea.
- Experience micro-teaching as first-year students.
- Engage in peer feedback and self-reflection to improve teaching techniques and skills.

※ 핵심 역량 및 소양

- (6C 역량) 지식탐구, 의사소통, 협업인성, (미래소양) 디지털

[3] Class Delivery Method

Face-to-face class: lectures and class discussion

Note: In case we have no access to AIDTs, AIDT function practices and AIDT-based micro-teaching presentations will be replaced by those using DTs along with independent, relevant, and appropriate AI digital tools.

※ 수업 방식 특징: 프로젝트기반, 협동학습

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	0 %	20 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm exam: 25%

Final exam: 25%

Final essay writing: 10%

- At the end of the semester before the final exam, students will be required to write a complete essay about a chosen topic.

Occasional homework assignments: 15%

- For some topics discussed in certain units, there will be assignments.

- No late submission will be accepted without a reasonable excuse in advance.

Team micro-teaching: 5%

- Students are required to use an AIDT and some AI/digital functions.

- Students are evaluated based on 1) their understanding and use of AIDTs and digital functions, 2) the content and organization of their lesson plans; and 3) their ability to make a presentation.

- Students are given feedback from the professor and peers and are required to submit their reflection paper.

Attendance: 20%

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Bailey, Stephen	Publisher	Routledge	Textbook	The Essentials of Academic Writing for International Students (2nd edition)	Issued year	2024
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction Academic Writing Quiz Part 1.1 – Writing Process: Writing Basics – Writing Skills: Approaches to Vocabulary – Lecture Slides and Discussion
Second week	Part 1.2 – Writing Process: Understanding Essay Questions – Writing Skills: Showing Cause and Effect – Lecture Slides and Discussion Part 1.3 – Writing Process: Reading – Finding Suitable Sources – Writing Skills: Understanding Prefixes and Suffixes – Lecture Slides and Discussion
Third week	Part 1.4 – Writing Process: Reading – Developing Critical Approaches – Writing Skills: Argument and Discussion – Lecture Slides and Discussion Part 1.5 – Writing Process: Finding Key Points and Note-Making – Writing Skills: Using Abbreviations – Lecture Slides and Discussion
Fourth week	Part 1.6 – Writing Process: Summarizing and Paraphrasing – Writing Skills: Finding Synonyms – Lecture Slides and Discussion Part 1.7 – Writing Process: References and Quotations – Writing Skills: Using Verbs of References – Lecture Slides and Discussion
Fifth week	Part 1.8: – Writing Process: Avoiding Plagiarism – Writing Skills: Giving Examples – Lecture Slides and Discussion Part 1.9 – Writing Process: Contrasting Sources – Writing Skills: Providing Cohesion – Lecture Slides and Discussion
Sixth week	Part 1.10 – Writing Process: Organizing Paragraphs – Writing Skills: Using Conjunctions – Lecture Slides and Discussion Part 1.11 – Writing Process: Introductions and Conclusions – Writing Skills: Giving Definitions – Lecture Slides and Discussion
Seventh week	Part 1.12 – Writing Process: Editing and Proofreading – Writing Skills: Academic Styles – Lecture Slides and Discussion

Eighth week	Review and Midterm Exam
Ninth week	AIDTs and their Major Functions AI Tools for Academic Writing – Lecture Slides and Discussion – AI/Digital Tool Practices
Tenth week	Part 2.1: Academic Vocabulary – Nouns and Adjectives Part 2.1: Academic Vocabulary – Verbs and Adverbs Vocabulary Practices with AIDTs – Lecture Slides and Discussion – AI/Digital Tool Practices
Eleventh week	Part 2.5: Comparisons Part 2.7: Passives Grammar Practices with AIDTs – Lecture Slides and Discussion – AI/Digital Tool Practices
Twelfth week	Part 2.8: Prepositions Part 2.10: Singular or Plural? Grammar Practices with AIDTs – Lecture Slides and Discussion – AI/Digital Tool Practices
Thirteenth week	Final Essay Writing Preparation Writing Practices with AIDTs – Discussion – AI/Digital Tool Practices
Fourteenth week	Team Micro-Teaching Presentations – to enhance general teaching competence through micro-teaching presentations – to develop practical teaching skills by using AIDTs and AI/digital tools – to foster critical thinking and a sense of community via self-reflection and peer feedback
Fifteenth week	Review and Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	English Communication in the Age of Artificial Intelligence	Course Number	0011983001
Major / School Year	Dept. of English Language Education / 2	completion division / Grade evaluation	/
Department/Professor	Institute of General Education / 매튜	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[NC-209:목(3)(4)(5)]
Office hours			

[1] Outline / Purpose

To teach how to present well to the class in a clear, entertaining, and informative way while keeping a close consideration to your audience.

[2] Course Learning Outcomes

By the end of the course, students should be able to design a well organized and clear presentation and deliver it confidently.

[3] Class Delivery Method

We will be using PPT slides and books while discussing and practicing with our peers in class.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
40 %	20 %	0 %	40 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
40 %	0 %	60 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Participation grade will be based on attendance and discussing the topics in class to the best of one's ability.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Handouts will be provided in class.	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to the syllabus Sign up for Kakaotalk group
Second week	Unit 1: My favorite thing the elevator pitch and brainstorming Choose your presentation topic for the semester
Third week	Unit 2: My book review Presentation introductions
Fourth week	Practice introductions Unit 3: My favorite club Hooks (effective openings)
Fifth week	Practice your hook and opening Unit 4: GM food body of presentation
Sixth week	Work on the body of presentation unit 5: a great invention transitions
Seventh week	Practice for your midterm exam (hook, introduction and body)
Eighth week	midterm exam
Ninth week	Practice your presentation film and send to a partner Unit 6: an experience that changed my mind
Tenth week	Unit 8: making it better conclusions
Eleventh week	Practice your presentation with conclusions Unit 9: a challenge i overcame body language
Twelfth week	Unit 12: the future designing ppt slides
Thirteenth week	final practice in front of class
Fourteenth week	final exam (final presentations) group A
Fifteenth week	final exam (final presentations) group B
Sixteenth week	

[7] Assignments

The first assignment	assignment	midterm test	submission date	2025-04-21 Mon
	purpose	to evaluate presentation skills		
	procedure & notice	in class		
	references			
The second assignment	assignment	final test group A	submission date	2025-06-02 Mon
	purpose	to evaluate presentation skills		
	procedure & notice	in class		
	references			
The third assignment	assignment	final test group B	submission date	2025-06-09 Mon
	purpose	to evaluate presentation skills		
	procedure & notice	in class		

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Contrastive Analysis of English and Korean and Grammar Instruction	Course Number	0011491001
Major / School Year	Dept. of English Language Education / 3	completion division /Grade evaluation	/
Department/Professor	Dept. of English Language Education / 김정수	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[NC-208:수(2B-3)] [NC-209:월(2B-3)]
Office hours	TBA		

[1] Outline / Purpose

This course introduces English and Korean linguistics from a contrastive perspective, targeting Korean language educators and others interested in the field. It explores key grammatical features of English and Korean, including sound systems, basic word structures, simple and complex sentence structures, agreement patterns, and figurative language. Through contrastive analysis, students will develop a deeper understanding of the linguistic properties of both languages and learn to apply their theoretical knowledge to real-life classroom settings, improving the teaching of English to Korean learners. In addition, the course discusses key functions of Artificial Intelligence Digital Textbooks (AIDTs) and provides opportunities for practical application. Students will also have opportunities to make micro-teaching presentations, using AIDTs.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

- Analyze and compare key syntactic, morphological, and semantic features of English and Korean using contrastive framework.
- Identify potential learning difficulties that Korean learners might face when learning English grammar.
- Develop practical grammar teaching methodologies informed by contrastive analysis.
- Evaluate the implications of contrastive analysis in designing English language teaching materials.
- Apply theoretical insights to real-world classroom contexts to improve teaching effectiveness.
- Understand some major functions in Artificial Intelligence Digital Textbooks (AIDTs) with a particular focus on some major English grammar components/constructions and their Korean counterparts.
- Enhance their micro-teaching strategies.
- Engage in peer feedback and self-reflection to improve teaching techniques and skills.

※ 핵심 역량 및 소양

- (6C 역량) 지식탐구, 의사소통, 협업인성
- (미래소양) 디지털

[3] Class Delivery Method

Face-to-face class: lectures and class discussion

Note: In case we have no access to AIDTs, AIDT function practices and AIDT-based micro-teaching presentations will be replaced by those using DTs along with independent, relevant, and appropriate AI digital tools.

※ 수업방식 특징: 협동학습

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	20 %	0 %	10 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm exam: 30%

Final exam: 30%

Homework assignments: 15%

- Every week there will be a homework assignment about each chapter.
- No late submission is possible without a reasonable excuse in advance.

Team micro-teaching: 5%

- Students are required to use an AIDT and some AI/digital functions.
- Students are evaluated based on 1) their understanding and use of AIDTs and AI/digital functions, 2) the content and organization of their lesson plans; and 3) their ability to make a presentation.
- Students are given feedback from the professor and peers and are required to submit their reflection paper.

Attendance: 20%

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Jong-Bok Kim	Publisher	Wiley	Textbook	English and Korean in Contrast: A	Issued year	2024

					Linguistic Introduction		
(2)	Author		Publisher		Textbook		Issued year
(3)	Author		Publisher		Textbook		Issued year

[Reference books]

(1)	Author		Publisher		Textbook		Issued year
(2)	Author		Publisher		Textbook		Issued year
(3)	Author		Publisher		Textbook		Issued year
(4)	Author		Publisher		Textbook		Issued year
(5)	Author		Publisher		Textbook		Issued year

[Other books]

[6] Weekly lesson plans

First week	Introduction; Some differences between Korean and English – Lecture slides and discussion – Homework assignment regarding selected exercises
Second week	Sounds and writing systems – Lecture slides and discussion – Homework assignment regarding selected exercises
Third week	Words – Lecture slides and discussion – Homework assignment regarding selected exercises
Fourth week	Phrases – Lecture slides and discussion – Homework assignment regarding selected exercises
Fifth week	Grammar rules – Lecture slides and discussion – Homework assignment regarding selected exercises
Sixth week	Tense and aspect – Lecture slides and discussion – Homework assignment regarding selected exercises
Seventh week	Auxiliary systems – Lecture slides and discussion – Homework assignment regarding selected exercises
Eighth week	Review; Midterm exam
Ninth week	Passives – Lecture slides and discussion – Homework assignment regarding selected exercises
Tenth week	Interrogative constructions – Lecture slides and discussion – Homework assignment regarding selected exercises
Eleventh week	Relative clauses – Lecture slides and discussion – Homework assignment regarding selected exercises
Twelfth week	Topic and focus – Lecture slides and discussion – Homework assignment regarding selected exercises
Thirteenth week	Topics and issues related to AIDTs and AI/digital tools – Lecture slides and discussion – AI/digital tool practices
Fourteenth week	Team micro-teaching – to enhance general teaching competence through micro-teaching presentations – to develop practical teaching skills by using AIDTs and AI/digital tools – to foster critical thinking and a sense of community via self-reflection and peer feedback
Fifteenth week	Review; Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Analysis of English Constructions and Descriptive Grammar	Course Number	0011496001
Major / School Year	Dept. of English Language Education / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of English Language Education / 김정수	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[NC-208:목(1-2A)] [NC-602:화(2B-3)]
Office hours	TBA	lecture room	

[1] Outline / Purpose

This course, designed for senior students majoring in English Language Education, first introduces key concepts from a generative syntax perspective, including structural relations, binding theory, X-bar theory, theta theory, movement operations, and raising/control constructions. Emphasizing the practical application of theoretical knowledge, the course incorporates problem-solving exercises, discussions, and critical reflections on the pedagogical implications of English syntax. In the latter part, the course also discusses major semantic and pragmatic concepts, including entailments, presuppositions, and Gricean implicatures. By the end of the course, students will be able to systematically analyze complex English constructions from syntactic, semantic, and pragmatic perspectives and articulate their grammatical properties within a descriptive framework. Moreover, the course examines the role of Artificial Intelligence Digital Textbooks (AIDTs), with a focus on their integration of English syntactic, semantic, and pragmatic features. Students will explore the practical applications of AIDTs and their potential for enhancing English language education, and using AIDTs, they will also have opportunities to make micro-teaching presentations.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

- Comprehend and explain foundational concepts in generative grammar, including structural relations, binding theory, X-bar theory, theta-theory, movement operations, and raising/control.
- Apply syntactic analysis to English sentences, identifying grammatical constructions and representing them via tree structures.
- Critically evaluate the implications of syntactic theory for English language teaching and learning.
- Develop problem-solving skills by engaging in practical exercises and syntactic analyses based on generative grammar principles.
- Discuss important semantic and pragmatic concepts such as entailments, presuppositions, and Gricean implicatures.
- Understand some major functions in Artificial Intelligence Digital Textbooks (AIDTs) with a particular focus on some major English syntactic, semantic, and pragmatic features.
- Enhance their micro-teaching strategies.
- Engage in peer feedback and self-reflection to improve teaching techniques and skills.

※ 핵심 역량 및 소양

- (6C 역량) 지식탐구, 의사소통, 협업인성
- (미래소양) 디지털

[3] Class Delivery Method

Face-to-face class; lectures and class discussion

Note: In case we have no access to AIDTs, AIDT function practices and AIDT-based micro-teaching presentations will be replaced by those using DTs along with independent, relevant, and appropriate AI digital tools.

※ 수업방식 특징: 협동학습

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	20 %	0 %	10 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm exam: 30%

Final exam: 30%

Homework assignments: 15%

- Whenever we finish a chapter or a topic, there will be a homework assignment about it
- No late submission is possible without a reasonable excuse in advance.

Team micro-teaching: 5%

- Students are required to use an AIDT and some AI/digital functions.
- Students are evaluated based on 1) their understanding and use of AIDTs and AI/digital functions, 2) the content and organization of their lesson plans; and 3) their ability to make a presentation.
- Students are given feedback from the professor and peers and are required to submit their reflection paper.

Attendance: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Andrew Carnie	Publisher	Wiley Blackwell	Textbook	Syntax: A Generative Introduction	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Syntax Chapter 4: Structural Relations – Lecture slides and discussion – Homework assignment regarding selected exercises
Second week	Syntax Chapter 5: Binding Theory – Lecture slides and discussion – Homework assignment regarding selected exercises
Third week	Syntax Chapter 6: X-bar Theory – Lecture slides and discussion – Homework assignment regarding selected exercises
Fourth week	Syntax Chapter 7: Extending X-bar Theory to Functional Categories – Lecture slides and discussion – Homework assignment regarding selected exercises
Fifth week	Syntax Chapter 8: Theta Theory – Lecture slides and discussion – Homework assignment regarding selected exercises
Sixth week	Syntax Chapter 10: Head-to-Head Movement – Lecture slides and discussion – Homework assignment regarding selected exercises
Seventh week	Syntax Chapter 11: DP Movement – Lecture slides and discussion – Homework assignment regarding selected exercises
Eighth week	Review and Midterm Exam
Ninth week	Syntax Chapter 12: Wh-movement and Locality Constraints – Lecture slides and discussion – Homework assignment regarding selected exercises
Tenth week	Syntax Chapter 15: Raising, Control, and Empty Categories – Lecture slides and discussion – Homework assignment regarding selected exercises
Eleventh week	Semantics: Entailments and Presuppositions – Lecture slides and discussion – Previous English teachers' bar exam questions
Twelfth week	Pragmatics: Gricean Implicatures – Lecture slides and discussion – Previous English teachers' bar exam questions
Thirteenth week	Topics and Issues related to AIDTs and AI/Digital Tools – Lecture slides and discussion – AI/digital tool practices
Fourteenth week	Team Micro-teaching – to enhance general teaching competence through micro-teaching presentations – to develop practical teaching skills by using AIDTs and AI/digital tools – to foster critical thinking and a sense of community via self-reflection and peer feedback
Fifteenth week	Review and Final Exam
Sixteenth week	

[7] Assignments

	assignment		submission	

The first assignment			date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Urban Data Mining	Course Number	0011135001
Major / School Year	Dept. of Urban Policy and Administration / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Policy and Administration / 양옥재	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-406:월(8B-9),수(8B-9)]
Office hours		lecture room	

[1] Outline / Purpose

This course focuses on quantitative data analysis for evidence-based planning. We will utilize data sets, visualization, descriptive statistics, trend analysis, and measures of concentration, similarity, and distribution to assess demographic, economic, and housing conditions within a community and develop planning narratives at both local and regional levels. The course is structured in a lecture-lab format and requires the use of MS Excel.

[2] Course Learning Outcomes

Course Learning Outcomes: Students who consistently and fully participate in course activities will:

- 1) Gain the familiarity and skills to find, develop, and manipulate key demographic, economic, and housing data for use in planning analysis;
- 2) Develop or refine the quantitative analysis skills necessary to carry out demographic and economic analyses, such as gaining a clear understanding of linear and exponential interpolation, trend analyses, basic regression, and inferential statistics by using Microsoft Excel;
- 3) Gain or refine their understanding of common terminologies and methods of population projection, economic analyses, and housing analysis; and
- 4) Learn to write coherent, relevant, professional documents presenting information meaningfully.

[3] Class Delivery Method

This course will be conducted in lecture (50%) and lab session (50%). This first half of the weekly class will be delivered basically through the instructor's lectures every class covering basic theories, policies, and case studies related to urban data mining. In addition, the other half of the weekly class will be delivered as lab sessions that give students practice in data collection, cleaning, analysis, and interpretation using real-world data. Please bring your laptops to every class session and plan ahead for saving data files, either on external or cloud-based storage. Microsoft Excel should be installed on your laptop for the computer lab session. All the lab examples and exercises will be based on Microsoft Excel.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

A+: 95 and above, A0: 90 - 94, B+: 85 - 89, B0: 80 - 84, C+: 75 - 79, C0: 70 - 74, D+: 65 - 69, D0: 60 - 64, F: Below 60

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 01: Course Overview & Introduction to Urban Data Mining
Second week	Week 02: Data Collection and Management for Analysis (1)
Third week	Week 03: Data Collection and Management for Analysis (2)
Fourth week	Week 04: Descriptive Statistics
Fifth week	Week 05: Data Visualization
Sixth week	Week 06: Inferential Statistics
Seventh week	Week 07: Regression Modeling
Eighth week	Week 08: Mid-Term Exam
Ninth week	Week 09: Demographic Analysis (1)
Tenth week	Week 10: Demographic Analysis (2)
Eleventh week	Week 11: Economic Analysis (1)
Twelfth week	Week 12: Economic Analysis (2)
Thirteenth week	Week 13: Housing Analysis (1)
Fourteenth week	Week 14: Housing Analysis (2)
Fifteenth week	Week 15: Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Final Report – Community Analysis	submission date	2025-06-11 Wed
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Urban Sociology and Theory	Course Number	0011990001
Major / School Year	Dept. of Urban Policy and Administration / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Policy and Administration / 최혜민	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[28-406:수(2B-3),목(2B-3)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Urban Research Analysis Methods	Course Number	0011129001
Major / School Year	Dept. of Urban Policy and Administration / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Policy and Administration / 김현우	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-406:월(7-8A),목(7-8A)]
Office hours	Thursday 14:00 - 16:00 or by appointment	lecture room	

[1] Outline / Purpose

This course is designed to help our department students to learn the introductory empirical analysis procedures and understand basic social science research processes. Students will learn the comprehensive social research methods and practices focusing on quantitative and qualitative approaches. Particularly, research design, setting hypothesis, sampling, ratio, and data management/analysis techniques will be taught during the class, in order to promote students' experimental design ability. This course requires pre-requisite and other department students need permission from the professor before taking the course.

During the COVID-19 (Coronavirus) situation, the non-face classes can be conducted in the following ways (this may change depending on the school's policy):

- LMS (or eLearning; cyber.inu.ac.kr) will be used for this period. Students are required to login the website during the class time.
- Real-time Zoom communication will be mostly used.
- Course lectures (PPTs or videos) will be uploaded on the eLearning.
- Students will individually read (or watch) lecture slides before the class, and there will be always simple discussion questions and/or assignments at the end of each lecture slide that you may need to respond.
- Your attendance will be covered by providing answers for these questions during the class (or after the class) and participating the real-time chatting room, which will be also created on eLearning.
- A separate folder will be created every week on eLearning, where you can answer the questions. I will let you know the due date during the class when to submit the responses.
- Please regularly check the 'Notice' for our class on eLearning.
- Students are required to turn-on the video while conducting the real-time class.
- If you have any questions during or after the class, do not hesitate to contact me through Kakao Talk, e-mail, or eLearning message.

[2] Course Learning Outcomes

After completing this course, students will develop a sufficient foundation from which they can begin to conduct their own quantitative and qualitative analyses.

Students will also critically evaluate the statistical analyses of others and understand statistical journal articles more fluently after the class.

[3] Class Delivery Method

Class will be held on a regular lecture style. Class discussions and exercises on statistical analyses will be conducted during the class.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	0 %	10 %	0 %	10 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	60 %	0 %	0 %	0 %	20 %	0 %

[4] Grading Policies

- Attendance : 20%
- Exam : Mid-term Exam; A total of 30%
- Assignment (Exercises) : 50%

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
30 %	20 %	50 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Earl Babbie	Publisher	Cengage Learning	Textbook	The Practices of Social Research, 13th Edition	Issued year	2012
(2)	Author	Yoonhwan Park	Publisher	Yoonsung-sa	Textbook	Basic Statistics for the Social Sciences	Issued year	2023
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Douglas Shafer, Zhiyi Zhang	Publisher	Flatworld Knowledge	Textbook	Introductory Statistics	Issued year	2013
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	– LMS: Course Introduction & Overview – LMS: What is Social Research?
Second week	– Research Processes
Third week	– Research Questions
Fourth week	– Hypothesis – Visit central library (Learning how to search research articles)
Fifth week	– Research Design Types
Sixth week	– Sampling, Index, Scale
Seventh week	– Field Research, Survey, Public Data – Quantitative & Qualitative Analyses
Eighth week	– Midterm Exam
Ninth week	– What is Statistics? – Variation, Graphing Data, Central Tendency
Tenth week	– Variability, Standardization, Z-Scores – Correlation – Class Exercise 1
Eleventh week	– Hypothesis Test – Population Estimation – Class Exercise 2
Twelfth week	– R Practice – Class Exercise 3
Thirteenth week	– T-test, ANOVA, Regression Analysis – Class Exercise 4
Fourteenth week	– R Practice 2 – Class Exercise 5 – Final Project
Fifteenth week	– Final Project
Sixteenth week	

[7] Assignments

The first assignment	assignment	Class Exercises	submission date	
	purpose	Students will conduct simple statistical analyses during the class.		
	procedure & notice	Students will conduct simple statistical analyses during the class by using Excel and R.		
	references	Class Lectures		
The second assignment	assignment	Develop Research Conceptual Model	submission date	
	purpose	Consider ideas for students thesis.		
	procedure & notice	Students will find issues that can be applied in their graduation thesis and present the conceptual model.		

	references	Internet: Journal papers: etc.		
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Urban Space and Society	Course Number	0011993001
Major / School Year	Dept. of Urban Policy and Administration / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Policy and Administration / 최혜민	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[28-405:월(4-5A),화(4-5A)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Urban Transport Planning	Course Number	0010507001
Major / School Year	Dept. of Urban Policy and Administration / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Policy and Administration / 양옥재	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-405:화(2B-3),목(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

The objective of this course is to familiarize students with contemporary perspectives on land use, transportation, and their coordination. The course is structured around four key components: land use and transportation planning, the four-step transportation demand model, sustainable urban development, design, and policy, and traffic safety.

[2] Course Learning Outcomes

By the end of the course, students will be able to:

- Identify conventional transportation planning policies and emerging trends, particularly their integration with land use planning.
- Understand the concepts, methods, and key variables of the four-step transportation demand model.
- Analyze planning methods, tools, and strategies for creating sustainable urban environments, focusing on reducing automobile dependency, promoting active transportation, and enhancing walkability.
- Explore the dynamics of traffic safety, transportation systems, and urban environments, while understanding traffic-calming approaches.

[3] Class Delivery Method

This class will primarily be conducted through instructor-led lectures during each session. However, active student participation in practice and discussion is essential to achieving the learning objectives successfully.

④ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	0 %	20 %	0 %	0 %	0 %	0 %

⑤ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

1. Exam (60%): The exam will consist of three parts: a midterm exam (25%), a final exam (25%), and a weekly quiz (10%). The midterm and final exams will follow traditional written test formats. Students will also take weekly quizzes designed to assess their understanding of the basic concepts covered in the prior week of the test.
2. Out of a maximum of 20 points (학칙시행세칙 제56조 제2항) → For general subjects (3 credits), 1/3 point will be deducted for every 1 hour of absence → 1 point will be deducted for 3 hours of absence. Students who miss more than one-third of the actual class hours or engage in academic dishonesty will not be granted course credits, regardless of their exam scores or other grades (학칙시행세칙 제56조 제3항).
3. Assignment (20%): the instructor will explain in the class.

⑥ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 01: Course Overview & Introduction to Transportation Planning – Overview of course objectives, topics, and structure – Introduction to key concepts of transportation planning
Second week	Week 02: Conventional Transportation Planning – Understanding traditional approaches and methodologies – Limitations and critiques of conventional planning
Third week	Week 03: Land Use and Transportation Planning – Relationship between land use patterns and transportation systems – Tools and techniques for integrated planning – 5-D variables (density, land use diversity, street design, destination, and distance to transit)
Fourth week	Week 04: Four-Step Transport Demand Modeling: Trip Generation – Key concepts of trip generation – Methods for trip generation – Factors influencing trip generation
Fifth week	Week 05: Four-Step Transport Demand Modeling: Trip Distribution – Key concepts of trip distribution – Methods for trip distribution – Factors influencing trip distribution
Sixth week	Week 06: Four-Step Transport Demand Modeling: Modal Split – Key concepts of modal split – Methods for modal split – Factors influencing modal split
Seventh week	Week 07: Four-Step Transport Demand Modeling: Trip Assignment – Key concepts of trip assignment – Methods for trip assignment – Factors influencing trip assignment
Eighth week	Week 08: Mid-Term Exam
Ninth week	Week 09: Sustainable Transportation System – Principles of sustainability in transportation – Challenges and case studies in sustainable transportation
Tenth week	Week 10: Urban Design/Development for Sustainable Transportation – Transit-oriented development (TOD), Polycentric development, Compact City, 15-minute city – Designing walkable and active transportation-friendly communities
Eleventh week	Week 11: Growth Management and Smart Growth – Planning tools and land use policies for managing urban growth – Smart growth principles and policies
Twelfth week	Week 12: Traffic Safety – Factors influencing traffic safety – Transport policies for reducing road traffic injuries
Thirteenth week	Week 13: Traffic Calming – Measures to slow down traffic and improve safety – Implementation and evaluation of traffic calming techniques
Fourteenth week	Week 14: Issues in Transportation – Emerging trends and challenges of transportation: low birth rates, climate change, gentrification, public health, and AI – Smart technology and urban environment (autonomous vehicles, on-demand transportation, unmanned aerial vehicles)
Fifteenth week	Week 15: Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The second assignment	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Smart City	Course Number	0009515001
Major / School Year	Dept. of Urban Policy and Administration / 4	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Policy and Administration / 양옥재	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-405:월(2B-3),수(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

This course aims to explore the intersection/relationships of the built environment and technology, primarily focusing on the concepts of smart cities and applications of relevant technologies in smart cities. The course will cover a range of topics, including urban planning, transportation, energy, communication, and social networks. Throughout the 16-week course, students will understand the various technologies used in cities, such as smart grids, autonomous vehicles, 5G networks, digital twins, and blockchain. They will also examine the benefits and drawbacks of these technologies, including their impact on the environment, privacy, and social equity. Also, students will be introduced to case studies of technologies used in urban planning throughout the world to tackle various urban challenges—such as traffic congestion and safety, pollution, climate change and natural disasters, participatory data-driven planning governance systems, equitable future urban growth and development, and so on. Students will conduct their own case studies of potential applications of technological innovations to address various urban planning problems and develop their own ideas for how technology can be used to create more livable, equitable, and sustainable cities.

[2] Course Learning Outcomes

By the end of the course, students will be able to:

- Identify the historical and current trends in applications of technology to urban planning
- Analyze and evaluate the impacts of technology on urban life
- Examine the social, economic, and political impacts of technological innovations on urban life
- Understanding the concept and fundamental principles of a smart city
- Understand the ethical and equity implications of (smart) city technologies in the urban context
- Exploring applications of various big data analytics, the Internet of Things (IoT), participatory GIS and scenario planning, crowdsourcing data analytics, and smart city governance to find solutions to current planning problems and develop guidelines for smart cities.
- Propose solutions for a more equitable and sustainable urban future through case studies of smart cities in the U.S. and other countries.

[3] Class Delivery Method

This class will be delivered basically through the instructor's lectures every class. Students will learn not only theories, policies, and cases of smart city initiatives related to urban planning but also information helping students prepare for career paths in smart cities. In addition, 3 or 4 guest lectures will be delivered by experts in the smart city industry. Those experienced experts who are working at renowned companies, such as LG U+, LG CNS, SK Telecom, and Seoul Housing and Communities Corporation (SH), will give students insights into smart city planning.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	10 %	5 %	0 %	0 %	5 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	70 %	0 %	20 %	0 %	10 %	0 %

[4] Grading Policies

- This class follows absolute evaluation.
 - A+: 95 and above, A0: 90 - 94, B+: 85 - 89, B0: 80 - 84, C+: 75 - 79, C0: 70 - 74, D+: 65 - 69, D0: 60 - 64, F: Below 60
 - Exam (60%): Mid-term exam (30%) + Final exam (30%)
- Students will take two written exams in the mid-term and final exam week. The exams will be conducted based on the materials we will cover throughout the semester.
- Attendance (20%): Out of a maximum of 20 points (학칙시행세칙 제56조 제2항) → For general subjects (3 credits), 1/3 point will be deducted for every 1 hour of absence → 1 point will be deducted for 3 hours of absence. Students who miss more than one-third of the actual class hours or engage in academic dishonesty will not be granted course credits, regardless of their exam scores or other grades (학생시행세칙 제56조 제3항).
 - Assignment (20%): Report on Smart City Policy (20%)

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Germaine Haleboua	Publisher	MIT Press	Textbook	MIT Press Essential Knowledge series Smart Cities	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 01: Course Overview & Introduction to Smart City i. Course Overview and Expectations / How to access textbooks and other reading materials via the LMS ii. What Is Urban Technology? What Is Smart Cities? Readings: Hurtado, P., Hitchings, B. G., Rouse, D. C. "PAS Report 599: Smart Cities – Integrating Technology, Community, and Nature." Chapter 1 (pp. 10–14).
Second week	Week 02: History of Smart City i. Historical Context of Urban Technology Readings: Tarr, Joel A., Josef W. Konvitz, and Mark H. Rose. "The Evolution of American Urban Technology." <i>Journal of Urban Technology</i> 1, no. 1 (September 1, 1992): 1–18. https://doi.org/10.1080/10630739208724458. Hurtado, P., Hitchings, B. G., Rouse, D. C. "PAS Report 599: Smart Cities – Integrating Technology, Community, and Nature." Chapter 2 (pp. 21–26). *No class on March 13 due to University Foundation Day. The instructor will upload the lecture recording on that day.
Third week	Week 03: Smart City Infrastructure i. Components of Smart City Infrastructure + Current Trends Readings: United Nations. "Smart cities and infrastructure" pp. 3–15. https://unctad.org/system/files/official-document/ecn162016d2_en.pdf
Fourth week	Week 04: Data Analytics in Smart Cities i. Data Analytics and Civic Analytics for Better Decision-Making for Smart Cities ii. Applications of the Internet of Things (IoT) to Urban Informatics and Smart Cities iii. Privacy Concerns in Data Analytics / The Ethics of Urban Technology Readings: Haleboua, Chapter 3 (pp. 85–110), Tonsager, L., Ponder, J. "Privacy Frameworks for Smart Cities" https://mcity.umich.edu/wp-content/uploads/2023/03/Privacy-Frameworks-for-Smart-Cities_White-Paper_2023.pdf
Fifth week	Week 05: Building / Land Use (Zoning) Technologies i. Innovations in Building Design and Construction Readings: Buckman, A.H., M. Mayfield, and Stephen B.M. Beck. "What Is a Smart Building?" <i>Smart and Sustainable Built Environment</i> 3, no. 2 (January 1, 2014): 92–109. https://doi.org/10.1108/SASBE-01-2014-0003. ii. Smart Buildings and the Future of Urban Design (a 2-hour lecture) Readings: American Planning Association. "Smart City Digital Twins." Accessed April 26, 2023. https://www.planning.org/publications/document/9209455/.
Sixth week	Week 06: Transportation / Smart Mobility i. Smart Transportation and Mobility ii. Equity and Accessibility in Smart Transportation Readings: Haleboua, Chapter 3 (pp. 110–113) Bodin, M. "Driving the Smart, Just City" <i>APA Planning Magazine</i> (December 2017)
Seventh week	Week 07: Energy and Urban Resilience in Smart Cities i. Smart Grids and Energy Management in Smart Cities ii. The Concept of Urban Resilience + Technological Innovations and Urban Resilience Readings: – U.S. Department of Energy. "What the Smart Grid Means to Americans" https://www.energy.gov/oe/articles/what-smart-grid-means-americans – DesRoches, R., Taylor, J. E. "The Promise of Smart and Resilient Cities." https://par.nsf.gov/servlets/purl/10132294
Eighth week	Mid-Term Exam

Ninth week	Week 09: Digital Twins in Smart City
Tenth week	Week 10: Blockchain and Smart Cities / Field trip: Incheon Smart City Center *No class on May 5 due to Children's Day. The instructor will upload the lecture recording on that day.
Eleventh week	Week 11: Governance and Policy in Smart Cities i. Urban Governance and Technological Innovations ii. Smart Cities and the Future of Urban Politics Readings: – Lorinc, J. "Dream States: Smart Cities, Technology, and the Pursuit of Urban Utopias." Chapter 10 (pp. 219–235) – Razaghim M., Finger, M. "Smart Governance for Smart Cities." Proceedings of the IEEE. 106(4), pp. 680–689.
Twelfth week	Week 12: Social Impacts of Smart City i. Social Inequality and Smart City Technology ii. Access to Resources and Digital Divides Readings: Green, Chapter 2 Institute of Electrical and Electronics Engineers (IEEE). "Solutions to the Digital Divide: Moving Toward a More Equitable Future." IEEE Connecting the Unconnected. Available from https://ctu.ieee.org/solutions-to-the-digital-divide-moving-toward-a-more-equitable-future/#:~:text=The%20digital%20divide%20refers%20to,have%20access%20to%20the%20internet
Thirteenth week	Week 13: Future of Smart Cities i. The Future of Urban Technology and Smart Cities / Course Wrap-Up and Review Readings: Halegoua, Chapter 5
Fourteenth week	Week 14: Final Report Presentation
Fifteenth week	Week 15: Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Smart City Policy Report	submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	STRUCTURAL MECHANICS(1)	Course Number	EPD6017001
Major / School Year	Dept. of Civil and Environmental Engineering / 3	completion division / Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering / 허종완	Grades/Lecture/Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[08-337:월(1)(2),수(1)]
Office hours			

[1] Outline / Purpose

평형 방정식으로 풀어낼 수 있는 정정 구조물의 부재력 및 처짐을 구하는 구조해석 방법을 습득한다.

[2] Course Learning Outcomes

정정구조물의 전통적인 해석방법을 습득한다.

[3] Class Delivery Method

판서로 강의를 진행한다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	R.C.Hibbeler	Publisher	Prentice Hall	Textbook	Structural Analysis	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Chapter 1 Chapter 2
Second week	Chapter 2
Third week	Chapter 2 Chapter 3
Fourth week	Chapter 3 Quiz 1
Fifth week	Chapter 3 Chapter 4
Sixth week	Chapter 4
Seventh week	Chapter 4 Quiz 2
Eighth week	Midterm Exam
Ninth week	Chapter 5
Tenth week	Chapter 5 Chapter 6
Eleventh week	Chapter 6 Quiz 3
Twelfth week	Chapter 7
Thirteenth week	Chapter 7 Chapter 8
Fourteenth week	Chapter 8
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	IoT in Construction System	Course Number	0011194001
Major / School Year	Dept. of Civil and Environmental Engineering / 3	completion division / Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering / 우상인	Grades/Lecture/ Practice	1 / 0 / 2
Phone Number		A weekday / class /	[09-123:수(6)(7)]
Office hours		lecture room	

[1] Outline / Purpose

This class "IoT in Construction System" mainly deals with sensors (such as temperature sensors, pressure sensors, and water level sensors), actuators (such as motors, pumps, heaters, and solenoids), and microcontrollers (such as Arduino and Raspberry Pi) that can be used in actual field works in civil and environmental engineering. During the class, students will learn how to connect sensors, actuators, and microcontrollers and how to control the system by applying programming codes. At the end of the class, there will be a term project where the students will unite their ideas to make a meaningful sensor-actuator system in the construction system.

[2] Course Learning Outcomes

- Understanding basic electrical wiring
- Capability to understand sensor-actuator-microcontroller systems
- Understanding mechanism of sensors and actuators
- Ability to measure physical quantities using sensors
- Ability to control actuators by passing signals from a microcontroller

[3] Class Delivery Method

Practice in a lab. (Please bring your laptop in the class)

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

o Evaluation Portions

- * Attendance: 20%
- * Assignments: 50% (In-class Assignments 25%, Project: 20%, Attitude: 5%)
- * Exam: 30%

o Attendance (20%)

- * Attendance section has total 20 points following the university regulation 56-2
- * 3 absences = 1 point deduction
- * If the absent hours are equal to or greater than 1/3 of total class hours, a student will fail in this class following the university regulation 56-3

o Assignments

* In-class Assignments (25%)

- For each class, there is a performance-based evaluation
- It will be easy; you should pass it if you focus on the class
- Instructor will NOT help you directly; its your job

* Project (20%)

- Proposal presentation: 5%
- Final presentation: 15%

* Attitude (5%)

- Dress code will be enforced for the safety reasons in the lab
- Pant or skirt must cover your low body starting your ankle
- No sleeveless top is allowed in the class
- You need to cover your body as much as possible
- You will get 1% deduction if you won't keep the dress code

* No running, throwing, and mischief in the lab

- Or, you will get 1% deduction

o Exam (30%)

- * Mechanisms of sensors and actuators
- * Arduino coding practices in given situations

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Lecture notes (provided by the instructor)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation (including group setting and safety issues)
Second week	Basics of Arduino C programming + water level sensors Assignment: Control LEDs + calibration of a water level sensor
Third week	Solenoid valves and relay modules Assignment: Control solenoids to adjust water flow
Fourth week	Strain gauge + load cell Assignment: Calibration of load cell
Fifth week	Construction of a scale Assignment: Calibration of a scale
Sixth week	Flexible pressure sensors + Sensor theory Assignment: Read the responses of a sensor
Seventh week	Linear variable differential transformer LVDT Assignment: Calibration and examples in laboratory tests
Eighth week	Distance sensor + Servo motor Assignment: Calibration of the distance sensors + Control a servo motor
Ninth week	P-wave sensor, manufacturing and propagation monitoring Assignment: Interpretation of P-wave signals in different media
Tenth week	S-wave sensor, manufacturing and propagation monitoring Assignment: Interpretation of S-wave signals with different water contents
Eleventh week	Real time clock, temperature sensor, RTC + LCD + SD Assignment: Long-term temperature logging using a SD card
Twelfth week	Global Navigation Satellite System (or Global Positioning System) Assignment: Track paths across the campus
Thirteenth week	Needle Probe Electrical Resistivity Assignment: Calibration using a conductivity meter
Fourteenth week	Final Project: Consultation
Fifteenth week	Final Project
Sixteenth week	

[7] Assignments

	assignment	In-class assignments at every class	submission date	
	purpose			

The first assignment	procedure & notice	- For each class, there is a performance-based evaluation - It will be easy; you should pass it if you focus on the class - Instructor will NOT help you directly; it's your job		
	references			
The second assignment	assignment	Term project	submission date	
	purpose			
	procedure & notice	- Proposal and final presentations		
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Water supply systems	Course Number	0011197001
Major / School Year	Dept. of Civil and Environmental Engineering / 3	completion division /Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-434:화(5)(6),수(5)]
Office hours		lecture room	

[1] Outline / Purpose

In this course, students will be educated about the physical water supply systems.

In order to supply abundant quantities of high-quality water to the residents, it is necessary to develop the water resources, to treat the raw water, and to carry the purified water to the consumers with stable water supply systems.

[2] Course Learning Outcomes

1. Understanding the whole process of water supply systems: water resources (river and lake), water intake, water purification, water transmission and water distribution systems.
2. Learning the basic water supply system with high water quality and training the basics and mechanism of the water supply systems and water purification
3. Design of water supply systems by practice of pipe network using EPA-NET simulation model

[3] Class Delivery Method

1. Presentation using PPT and practice for numerical analysis modeling included.
2. Assignments & exams.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	0 %	20 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	70 %	0 %	10 %	0 %	20 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Malcolm J. Brandt, K. Michael Johnson, ... Don D. Ratnayaka	Publisher	IWA	Textbook	Twort's Water Supply	Issued year	2016
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction & overview
Second week	1. Basic design & plan of water supply systems
Third week	2. Water Demand
Fourth week	3. Water resource and intake facilities
Fifth week	4. Transmission and distribution systems (1)
Sixth week	4. Transmission and distribution systems (2)
Seventh week	5. Draft design of water supply systems
Eighth week	Mid term project
Ninth week	6. Water treatment
Tenth week	Field trip (Water treatment Plant)
Eleventh week	7. Theory of Water distribution modeling
Twelfth week	8. Practice of EPANET (1)
Thirteenth week	8. Practice of EPANET (2)
Fourteenth week	Design of water supply system
Fifteenth week	Final term exam Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	HYDRO INFORMATICS	Course Number	0001450001
Major / School Year	Dept. of Civil and Environmental Engineering / 4	completion division / Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-434:월(4)(5),수(7)]
Office hours			

[1] Outline / Purpose

1. Learn how to use the program for various water flows, and make it practical for use. In addition, theories and practices can be connected and utilized.
2. Understand the water flow and Learn about the boundary conditions to interpret it.
3. Understand the basic pipe network configuration and the requirements for the pipe network analysis.
4. Increase the availability of hydraulic information through computer-based software training.

[2] Course Learning Outcomes

Improve the applying skills by learning the numerical analysis model and solve the actual problem in field.
Designs of real hydraulic structures for hydrological, hydraulics systems are performed by computer model, it can improve the overall understanding of flood estimation and hydraulic analysis.

[3] Class Delivery Method

1. Face to face lecture – Some video clips can be provided in the E-learning system.
2. Presentation using PPT and practice for numerical analysis modeling included.
3. Theoretical lectures and computer simulation exercises included. There are individual project, mid-term and final exams.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	0 %	20 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	50 %	0 %	0 %	0 %	30 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course instructions and Introduction of Hydroinformatics
Second week	Fundamental Equation of Flow and Computer Based Analysis
Third week	Introduction to Water Engineering Hydrological Analysis
Fourth week	Rainfall Analysis & Rainfall Intensity, Practice (FARD) (1)
Fifth week	Rainfall Analysis & Rainfall Intensity, Practice (FARD) (2)
Sixth week	Practice (HEC-HMS) for Analyzing Watershed Systems (1)
Seventh week	Practice (HEC-HMS) for Analyzing Watershed Systems (2)
Eighth week	Mid-Term Exam
Ninth week	Introduction to Water Engineering River Hydraulics
Tenth week	Practice (HEC-RAS) for River Analysis (1)
Eleventh week	Practice (HEC-RAS) for River Analysis (2)
Twelfth week	Introduction to Water Engineering : Urban Drainage System (1)
Thirteenth week	Introduction to Water Engineering : Urban Drainage System (2)
Fourteenth week	Application of Numerical Analysis Model to the Real Site
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	BRIDGE ENGINEERING	Course Number	EPD6090001
Major / School Year	Dept. of Civil and Environmental Engineering / 4	completion division / Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-434:화(7)(8)(9)]
Office hours			

[1] Outline / Purpose

This lecture aims to examine the bridge design standards for theoretical learning on the dynamic behavior and design of bridge structures.

[2] Course Learning Outcomes

It aims to acquire basic knowledge on the structural design of bridges and introduces the basic concepts of structural dynamics for bridge design.

[3] Class Delivery Method

The lecture is basically conducted using PPT during class time to improve students' understanding of the bridge design subject.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	90 %	0 %	0 %	0 %	10 %	0 %

[4] Grading Policies

Exam 60% (midterm: 30%, final: 30%), attendance: 20%, assignments: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	PPT	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Design methodology (ASD and LRFD)
Third week	Types and components of bridges
Fourth week	Bridge design specifications
Fifth week	Bridge design loads
Sixth week	Influence lines
Seventh week	Influence lines
Eighth week	Midterm exam
Ninth week	Introduction on the design of composite beams
Tenth week	Design of composite beams
Eleventh week	Design of composite beams
Twelfth week	Design of composite beams
Thirteenth week	Fatigue
Fourteenth week	Fatigue
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Environmental Data and Analysis	Course Number	0006061001
Major / School Year	Dept. of Environmental Engineering / 2	completion division / Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering / 이희관	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[04-105:화(1)(2)(4)]
Office hours		lecture room	

[1] Outline / Purpose

- In the field of environmental engineering, understanding concerned environmental status or situation would be crucial for engineers' task to carry out. There exists plenty amount of data / information available and useful for field work. In the process, the theories and principals for statistics and data analysis would be required and provided for this course.
 - Students will be introduced to a wide range of environmental data / information in order to provide them available sources and experience of the values. Students will also review and analyze latest version of domestic and worldwide environmental information to open their future vision.

[2] Course Learning Outcomes

- Review different environmental information / data
- Understand the fundamentals of environmental statistics
- Practice environmental data processing
- Practice the manner of scientific communication via term project

[3] Class Delivery Method

- Join to the lecture
- Prepare and share seminar presentations
- Collect and analysis current facts on indoor air quality

④ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

⑤ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

- Exam / quiz 50% / Term project 20% / Assignment 10% / Attendance 20%

④ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
 · 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Clinton Brownley	Publisher	O'Reilly Media	Textbook	Foundations for Analytics with Python	Issued year	2016
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Wes McKinney	Publisher	O'Reilly Media	Textbook	Python for Data Analysis, 2nd Edition	Issued year	2017
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Intro
Second week	Python Basics
Third week	Python Basics
Fourth week	Comma-Separated Values (CSV) Files
Fifth week	Comma-Separated Values (CSV) Files
Sixth week	Exel Files
Seventh week	Exel Files
Eighth week	Term Projects
Ninth week	Figures and Plots
Tenth week	Figures and Plots
Eleventh week	Descriptive Statistics and Modeling
Twelfth week	Descriptive Statistics and Modeling
Thirteenth week	Time Series
Fourteenth week	Time Series
Fifteenth week	Conference for Term Projcet
Sixteenth week	Final Exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Climate Change Engineering	Course Number	0006057001
Major / School Year	Dept. of Environmental Engineering / 4	completion division / Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering / 이희관	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[28-302:월(5B-6),수(2B-3)]
Office hours			

[1] Outline / Purpose

Unprecedented changes in climate has been observed since last decade, which subsequently effects on earth environment. The temperature of the earth atmosphere increases and it effects on global meteorology, lively hood, etc. It has been found that the major causes of the climate change are the GHGs in the atmosphere and excess use of fossil fuels for energy. For dealing this situation, students need to be aware of climate change pattern, its cause, effects and possible solutions.

[2] Course Learning Outcomes

The major purpose of this lecture is to educate students about the earth climate, trend of climate change, major causes, effects, and recent practices for adapting and mitigating the climate change effects.

[3] Class Delivery Method

Lecture / Group discussion / Team collaboration / Presentation / Field trip / Invited lecture

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	10 %	10 %	10 %	5 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	0 %	50 %	0 %	10 %	0 %	10 %	0 %

[4] Grading Policies

Exam / quiz 40%

Assignment 20%

Term project 20%

Attendance 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	John T. Hardy	Publisher	John Wiley & Sons Ltd	Textbook	Climate Change	Issued year	
(2)	Author	Donald Rapp	Publisher	Springer (Praxis Publishing)	Textbook	Assessing Climate Change	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Rob Roggema	Publisher	Springer	Textbook	Adaptation to Climate Change: A Spatial Challenge	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	– Introduction for the lecture
Second week	– Earth energy balance, the greenhouse Effect and warming potential
Third week	– Historical variation in the earth climate
Fourth week	– Recent climate change: The earth responds
Fifth week	– Future climate change: The twenty-first century and beyond
Sixth week	– Anthropogenic influence on climate change
Seventh week	– Impact of global warming on earth environment
Eighth week	– Midterm exam
Ninth week	– Effect of climate change on ecological system
Tenth week	– Impact on human settlement and infrastructure
Eleventh week	– Effect of climate change on human health
Twelfth week	– Adaptation to climate change: case studies
Thirteenth week	– Mitigation: Reducing the impacts
Fourteenth week	– Policy, politics, and economics of climate change
Fifteenth week	– Term project
Sixteenth week	– Final exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Environmental Remediation Engineering	Course Number	0006874001
Major / School Year	Dept. of Environmental Engineering / 4	completion division / Grade evaluation	/
Department/Professor	School of Urban and Environmental Engineering / 김철용	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[28-302:월(8B-9),목(1-2A)]
Office hours			

[1] Outline / Purpose

**This course is an in-depth course for students who have completed "Environmental Chemistry" or equivalent courses. Environmental remediation includes the processes to remove pollution or contaminants from groundwater and soil. Environmental remediation is becoming more important nationally and globally because of many emerging subsurface contamination cases.

[2] Course Learning Outcomes

- Understanding the principles and mechanisms of environmental remediation processes
- Learning the fate of environmental contaminants in the subsurface

[3] Class Delivery Method

- Lecture using powerpoint slides

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
70 %	20 %	10 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Chunlong (Carl) Zhang	Publisher	Wiley	Textbook	Soil and Groundwater Remediation	Issued year	2020
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	LaGrega et al.	Publisher	Waveland Pr Inc	Textbook	Hazardous Waste Management	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Groundwater
Third week	Soil characteristics
Fourth week	Aquifer hydrology
Fifth week	Contaminant characteristics
Sixth week	Fate of subsurface contaminants 1
Seventh week	Fate of subsurface contaminants 2 Mid-Term Exam
Eighth week	Physical remediation processes
Ninth week	Chemical remediation processes 1
Tenth week	Chemical remediation processes 2
Eleventh week	Chemical remediation processes 3
Twelfth week	Biological remediation processes
Thirteenth week	Other remediation options
Fourteenth week	Case study
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Remediation Case Study	submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	The Site Planning Studio	Course Number	0011502001
Major / School Year	Dept. of Urban Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Engineering / 한소영	Grades/Lecture/ Practice	3 / 2 / 2
Phone Number		A weekday / class / lecture room	[27-205-1:목(5)(6)(7)(8)]
Office hours			

[1] Outline / Purpose

This course examines site planning as a process of creating the built environment. The elements a site planner considers are diverse, and include site hydrology, soils, vegetation, topography, uses, building arrangement and form, access, regulation, markets, and local community priorities. In this class students will review historical and contemporary theories of urban design.

[2] Course Learning Outcomes

Over the course of the semester, working in teams, students will conduct a site analysis and propose a site plan for a hypothetical mixed-use development. Students will also learn the basics of the 3D modeling software, SketchUp. Students will present their final project to a mock design review committee during the exam period.

[3] Class Delivery Method

Class sessions will consist of lecture and discussion or of site visits, tours, films or skillbuilding exercises.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Overview In class: discuss syllabus and assignments
Second week	What is Site Planning? Kevin Lynch and Gary Hack. 1984. Site Planning 3rd edition. Cambridge: MIT Press: "The Art of Site Planning," 1–28 In class: lecture and discussion
Third week	Zoning & Other Regulations Duerksen, Christopher J., C. Gregory Dale and Donald L. Elliott. 2009. The Citizens Guide to Planning 4th ed. Excerpts from Putting the Plan to Work Implementation, 77–85 and 93–106 Chapel Hill Land Use Management Ordinance, https://www.municode.com/library/nc/chapel_hill/codes/code_of_ordinances?nodeId=CO_APXALAUSMA Section 3.3.1 Town Center, Use Matrix Table 3.7–1, Chapter 3.8 Dimensional Standards, and Section 5.9.7 Minimum and Maximum Off-Street Parking Requirements
Fourth week	The Conceptual Dimension of Urban Design LaGro, James A. Jr., Site Analysis: A Contextual Approach to Sustainable Land Planning and Site Design (John Wiley & Sons, 2008): Conceptual Design 209–249
Fifth week	Introduction to the Neighborhood and the Site Duerksen, Christopher J., C. Gregory Dale and Donald L. Elliott. 2009. The Citizens Guide to Planning 4th ed. Navigating the Planning Landscape, 17–36 and What are We Trying to Achieve? 63–76 In class: lecture and discussion
Sixth week	The Morphological Dimension of Urban Design Carmona, Matthew et al. 2003. Public Places: Urban Traces Amsterdam: Elsevier: Excerpt from Urban Change, 20–26 and The Morphological Dimension, 61–86 In class: Sketchup Workshop
Seventh week	Access & Streets Kevin Lynch and Gary Hack, Site Planning (MIT Press, 1984 [3rd edition]): Access 193–222 e-book: Elizabeth MacDonald, Streets and the public realm: emerging designs, in Banerjee, T. & Loukaitou-Sideris, eds., Companion to Urban Design (Routledge, 2011): 419–432
Eighth week	PIN-UP REVIEW
Ninth week	Cultural Attributes LaGro, James A. Jr., Site Analysis: A Contextual Approach to Sustainable Land Planning and Site Design (John Wiley & Sons, 2008): Site Inventory: Cultural Attributes, 139–168 In class: lecture and discussion
Tenth week	The Perceptual Dimension of Urban Design I Lynch, Kevin. 1960. The Image of the City. Cambridge: MIT Press. "The Image of the Environment," 1–13; "The City Image and Its Elements," 46–90 In class: lecture and discussion
Eleventh week	The Perceptual Dimension of Urban Design II Carmona, Matthew et al. 2003. Public Places: Urban Traces Amsterdam: Elsevier: Excerpt from The perceptual dimension, 93–105; excerpt from The Functional Dimension, 165–177 In class: lecture and discussion
Twelfth week	The Social Dimension of Urban Design Carmona, Matthew et al. 2003. Public Places: Urban Traces Amsterdam: Elsevier: The Social Dimension, 106–129 Jane Jacobs, The Death and Life of Great American Cities (Vintage, 1961): "The Uses of Sidewalks," 29–73 In class: lecture and discussion
Thirteenth week	The Visual Dimension of Urban Design I Gordon Cullen, Townscape, (Rheinhold, 1971 [2nd edition]): "Introduction," 7–12; "Serial Vision," 17–56 In class: lecture and discussion
Fourteenth week	The Visual Dimension of Urban Design II Carmona, Matthew et al. 2003. Public Places Urban Traces Amsterdam: Elsevier. Excerpt from The Visual Dimension, 138–148 In class: lecture and discussion
Fifteenth week	Final Review
Sixteenth week	

[7] Assignments

			submission	

The first assignment	assignment		date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Urban Design Studio	Course Number	0011161001
Major / School Year	Dept. of Urban Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Engineering / 김도훈	Grades/Lecture/ Practice	4 / 2 / 4
Phone Number		A weekday / class /	[28-303:목(4)(5)(6)(7)(8)(9)]
Office hours		lecture room	

[1] Outline / Purpose

Contemporary society has continued to experience a period of high growth as it undergoes a restructuring of the industrial structure and rapid informatization. However, with the recent emergence of issues such as aging, population decline, climate change, and economic recession, the industry is facing a period of stagnation or decline rather than progressive growth. In response to these changes, the city is undergoing more passive change than rapid development. The proportion of large-scale projects, such as the construction of large-scale complex buildings, new town development, and redevelopment and reconstruction, is gradually decreasing. Nowadays, it is becoming common to make gradual changes rather than promote radical growth. The urban design methodology that creates changes in cities is also emphasizing small-scale regional regeneration rather than focusing on hardware maintenance. By considering industries, people, and spaces rooted in the local area, small-scale regeneration increases value and promotes change. We refer to this approach as regional management. This is a new public implementation method that utilizes the region's human and physical assets to solve the region's challenges through cooperative relationships between residents, office workers, and visitors. The scope of the project is being expanded to include public spaces, such as roads, waterfronts, parks, and squares, as well as public spaces on private land, such as public notice boards and atrium spaces. In this class, we will diagnose community issues and introduce and utilize the concept of community management as a way to solve problems. At the beginning of the class, students will understand the concept of regional management and think about solutions to regional problems in creative and innovative ways. We will use the proposed urban design methodology to change the target site and derive the final results. Deriving concrete, practical, and useful measures is an important task.

[2] Course Learning Outcomes

Local branding and regional management to enhance the value of cities: Bukchon and Seochon
Each team should select Bukchon and Seochon, the villages next to Gyeongbokgung Palace, as the target area, take the above themes into consideration, and propose future-oriented solutions. Urban engineering, which requires more convergence and integration capabilities than any other field, aims to lay the foundation for growth. It is important to look at urban problems from various perspectives, including politics, society, history, culture, architecture, and transportation, and to derive practical and useful solutions. Specifically, this class encourages students to understand urban space from the viewpoints of various stakeholders.

[3] Class Delivery Method

Team of 3-4 people, to be determined once we have the final count
Each class starts with a discussion and evaluation of the work done by each person, followed by a build-up to the next.
Assignments must be printed prior to class
Materials shown in class will be posted on INU LMS
All deliverables must be worked in English.
Each individual must write a design note, which will be reflected in their individual evaluation.

Deliverables : A0 Panel / Model / Design Note
(Diagrams and illustrations related to urban design)

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Objective evaluation of intermediate and final deliverables by internal or external experts
Assignment: Design Note 30%, Final Panel 40%, Peer Evaluation 10%

① Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	모리기념재단	Publisher	미세움	Textbook	도시의 가치를 높이는 지역 매니지먼트	Issued year	
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Part 1 Introduction <Introduction > Introduction of studio : Course Objectives, Course Structure, Deliverables, Grading, Team member
Second week	<Team/Course Logistics > Select potential Sites and Present their findings : Find other documents/drawings related to recent/future development plans and history of Site.
Third week	<Initial Research, Community Meeting Prep > Class Lecture : Precedent Case Study / Prepare for site visit and community meeting
Fourth week	<Field Trip & Site visit > Visit Teams Site and Exploring key Issue Review of community meeting materials
Fifth week	Part 2 Understanding the site and context <Site Analysis 1 > Create a base map using GIS(DWG) : Road network, open spaces, land use, transportation, water, topography, historical sites, and others.
Sixth week	<Site Analysis 2 > Develop diagrams that illustrate your site/context research : Historical context and cultural significance of the Site.
Seventh week	<Site Analysis 3 > Pin-up of your findings, diagrams, research, and other documents/drawings
Eighth week	<Midterm Presentation > Presentation to internal/external reviewers : PowerPoint/PDF Presentation/panels, and others
Ninth week	Part 3 Urban Design Development <Concept Development > Present your findings and concepts :Landuse, Network, landscape, Facilities, ecological elements, etc.
Tenth week	<Framwork Development 2D & 3D > Diagrams, plans, 3D Image, Program, Sections, Elevations, and others.
Eleventh week	<Framwork Development 2D & 3D > Diagrams, plans, 3D Image, Program, Sections, Elevations, and others.
Twelfth week	Part 4 Final Revisions <Final Design Development > Individual Team Critic : Panel Layout, Diagram, Masterplan, Rendering Images, Elevations, etc
Thirteenth week	<Final Design Development > Prepare an model of Urban Design
Fourteenth week	Part 5 Final Presentation & Exhibition Prepare Final presentation
Fifteenth week	Final exam
Sixteenth week	<Final Presentation > Final presentation to internal and external guests

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			

	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Urban Spatial Inequality	Course Number	0012003001
Major / School Year	Dept. of Urban Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Dept. of Urban Engineering / 엄현주	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[28-304:화(4-5A),수(2B-3)]
Office hours			

[1] Outline / Purpose

This course explores the way that cities shape social life, considering spatial context as fundamental to understanding the social world. Over the semester, this course will explore three essential components of the city: 1) its formation, 2) its geographical and physical structure and composition, and 3) social organization among its residents. We will pivot between an examination of macro-level processes of the shape and character of the city, and the micro-level processes through which the urban context shapes the lives and social interactions of those who reside within it.

[2] Course Learning Outcomes

Understand Key Concepts and Theories: Explain the fundamental concepts, theories, and dimensions of urban inequality, including spatial, social, economic, and environmental disparities.

Evaluate Policies and Strategies: Assess the effectiveness of urban planning and policy interventions aimed at mitigating urban inequalities, such as affordable housing, equitable transportation, and access to services.

Engage with Case Studies: Examine and compare international and local case studies to identify patterns, successes, and challenges in addressing urban inequality.

[3] Class Delivery Method

Lecture, Student Presentations

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

lectures & student led presentations

① Percentage of grade evaluation

Exam	Attendance	Assignment
30 %	20 %	50 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Course Introduction – syllabus review, personal introduction; What is inequality and why is it important, Allocation of discussion leader assignments
Second week	Spatial Inequality and Urbanization
Third week	Social Hierarchies in Cities (The truly disadvantaged: class, race, ethnicity, and culture)
Fourth week	Economic Inequality (Spatial Mismatch, Wealth Concentration, Geography of Opportunity)
Fifth week	Housing Inequality (Housing affordability; Segregation; Housing Experiment)
Sixth week	Transportation and Accessibility (Transit deserts, Infrastructure biases favoring private vehicles over public transit, Transportation costs and their burden on low-income groups)
Seventh week	Social Capital and Social Disadvantage (Crime)
Eighth week	Environmental Inequality (Disaster, Health, Parks, Pollution, Climate)
Ninth week	Political Inequality (Power and the Political Economy of Space – Reading: The City as a Growth Machine, Marginalization in urban planning decisions)
Tenth week	Digital Inequality (Access to high-speed internet, Impacts of digital divides, Smart city initiatives)
Eleventh week	Gentrification and Enclaves, Privatized Public Spaces
Twelfth week	Causes of Inequality (Economic factors, Historical Legacies, Urban Politics and Governance, Spatial Planning Practices)
Thirteenth week	Inequality in Korea , Seoul
Fourteenth week	Strategies for Equality, Just City
Fifteenth week	Review & Class Discussion on Urban Inequality
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Architectural Design Basics 1	Course Number	0009517002
Major / School Year	Division of Architecture & Urban Design / 1	completion division /Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 김한규	Grades/Lecture/Practice	3 / 0 / 6
Phone Number		A weekday / class / lecture room	[27-313:수(1-2A)(2B-3)(4-5A)(5B-6)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	BUILDING MATERIALS	Course Number	EPE6037001
Major / School Year	Major of Architectural Engineering / 2	completion division / Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 장정국	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[28-607:월(5B-6),화(7-8A)]
Office hours	Thu 1-3pm		

[1] Outline / Purpose

This course introduces a general overview of basic building materials in terms of properties, manufacturing methods and uses, which can affect structural performance and functionality of buildings. Especially, this course covers the social needs for performance improvement of building materials, provide basic knowledge on materials selection for planning, design and construction of buildings.

[2] Course Learning Outcomes

- To understand characteristics, manufacturing methods and uses of building materials
- To understand mechanical property, durability and environmental impact of building materials used with various purposes
- To provide students with an introduction to the recently developed novel materials and its application

[3] Class Delivery Method

- Lectures on basic theory of building materials
- Assignments for case study of building materials

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	0 %	10 %	0 %	20 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	0 %	0 %	0 %	0 %	80 %	0 %

[4] Grading Policies

1. Midterm exam: 30%, Final exam: 30%
2. Attendance 20%
3. Assignment: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Handout	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Architectural Institute of Korea	Publisher	Architectural Institute of Korea	Textbook	Building Materials	Issued year	2016
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction of building materials
Second week	Cement
Third week	Cement
Fourth week	Admixture
Fifth week	Aggregate and water
Sixth week	Fresh concrete
Seventh week	Hardened concrete
Eighth week	Midterm exam
Ninth week	Special concrete & concrete product
Tenth week	Timber
Eleventh week	Metallic materials
Twelfth week	Clay, brick, masonry, glass
Thirteenth week	Plastic and insulation materials
Fourteenth week	Team project
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Novel building materials & technology	submission date	
	purpose	To improve the understanding of novel building materials & technology		
	procedure & notice	PPT group presentation		
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Construction Cost Management	Course Number	0011149001
Major / School Year	Major of Architectural Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 구충완	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-603:월(2B-3)] [28-607:목(7-8A)]
Office hours	별도공지	lecture room	

[1] Outline / Purpose

1. Understanding of project and contract administration (e.g., delivery/procurement/payment methods)
2. Understanding of quantity surveying methods by element and cost estimation methods by phase
3. Understanding of construction cost management practice

[2] Course Learning Outcomes

This course will provide a general understanding of construction cost management, including project and contract administration as well as quantity surveying and cost estimation methods. When entering the field of business, students will be the experts who can perform effective project management with the expertise of cost planning and management.

[3] Class Delivery Method

1. Lecture : Theory of quantity surveying and cost estimation methods
2. Tutorial : Practice of quantity surveying and cost estimation methods
3. Evaluation: Examination (mid-term/final), attendance

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	40 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %

[4] Grading Policies

[Evaluation]

1. Mid-term exam (40%), Final exam (40%)
2. Recommended list of material that students can bring to the examination venue: Electronic calculators

[Attendance]

1. Deduction of 1 point out of 20 points by absence
2. 3 late arrivals equal to 1 absence
3. For more than 4 absences, attendance score will be zero point

③ Percentage of grade evaluation

Exam	Attendance	Assignment
80 %	20 %	0 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Wayne J. Del	Publisher	RSMeans	Textbook	Estimating Building Costs (2nd edition)	Issued year	2012
(2)	Author	Daniel W. Halpin, Bolivar A. Senior, & Gunnar Lucko	Publisher	Wiley	Textbook	Construction Management 5th Edition	Issued year	2017
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	CMAA	Publisher	CMAA	Textbook	Cost Management Guidelines	Issued year	2018
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	* Topic: Orientation & construction cost management * Contents: Main concept of construction cost management * Source: Handout
Second week	* Topic: Fundamentals of project and contract administration * Contents: Construction project management, bid package, and construction project contract * Source: Handout
Third week	* Topic: Construction project delivery methods * Contents: Project delivery, design-bid-build, design-build, CM-at-risk, and IPD * Source: Handout
Fourth week	* Topic: Construction project procurement procedure and tender evaluation * Contents: Procurement procedure, tender evaluation, and practice for best value * Source: Handout
Fifth week	* Topic: Construction project payment and cost management * Contents: Fixed price contract, cost reimbursement contract and comparison of project payment * Source: Handout
Sixth week	* Topic: Professional cost management practice * Contents: Masterformat, Uniformat, RSMeans, and professional practice * Source: Handout
Seventh week	* Topic: Preparation of mid-term exam & feedback * Contents: Summary and feedback with subject examiner * Source: Handout
Eighth week	* Topic: Mid-term exam (out of 40) * Contents: Cumulative scope (2-7 weeks) * Source: Handout
Ninth week	* Topic: Fundamentals of quantity surveying and temporary work * Contents: Fundamentals and quantity surveying in temporary work * Source: Handout
Tenth week	* Topic: Earth work * Contents: Quantity surveying in earth work * Source: Handout
Eleventh week	* Topic: Reinforced concrete work (1/2) * Contents: Quantity surveying for concrete mix * Source: Handout
Twelfth week	* Topic: Reinforced concrete work (2/2) * Contents: Quantity surveying for concrete & formwork by element * Source: Handout
Thirteenth week	* Topic: Other works * Contents: Quantity surveying for other works * Source: Handout
Fourteenth week	* Topic: Preparation of final exam & feedback * Contents: Summary and feedback with subject examiner * Source: Handout
Fifteenth week	* Topic: Final exam (out of 40) * Contents: Cumulative scope (9-14 weeks) * Source: Handout
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	BUILDING EQUIPMENT(1)	Course Number	EPE6024001
Major / School Year	Major of Architectural Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 박상훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-603:월(5B-6),화(7-8A)]
Office hours	Wed. 15:00-17:00	lecture room	

[1] Outline / Purpose

It is significant to apply building mechanical systems properly in improving and maintaining the environmental quality and energy performance of buildings. This course provides the fundamentals and design of building facilities.

[2] Course Learning Outcomes

- We can learn how to calculate indoor cooling and heating load affecting building energy consumptions.
- We can understand the background, theory, and characteristics of building energy systems (HVAC).
- We are able to design building facilities with engineering tools.
- We can study high technologies in building energy systems.

[3] Class Delivery Method

Lecture-oriented classes and problem solving are conducted during class. If you have any questions, please use Office Hour or send an e-mail.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Fundamentals on Heat transfer and thermodynamics in buildings
Third week	Water supply, Drainage and Sanitation Facilities
Fourth week	Water supply facilities
Fifth week	Hot water supply facilities
Sixth week	Drainage and ventilation facilities 1
Seventh week	Drainage and ventilation facilities 2
Eighth week	Mid-term Exam
Ninth week	Sanitary facilities
Tenth week	Fire protection equipment
Eleventh week	Gas equipment
Twelfth week	Building HVAC systems
Thirteenth week	Indoor environment and HVAC systems
Fourteenth week	Group project presentation
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	BIM-based construction information management	Course Number	0007810001
Major / School Year	Major of Architectural Engineering / 3	completion division / Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 이슬비	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[27-312:수(2B-3)] [28-603:화(5B-6)]
Office hours			

[1] Outline / Purpose

This course covers the fundamental concepts, roles, and functions of Building Information Modeling (BIM) for construction project management.

[2] Course Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Model their buildings using BIM tools and analyze the model applying nD analysis tools.
2. Discuss how the construction industry will change due to the introduction of BIM.

[3] Class Delivery Method

This course will be delivered face to face in principle; however, it may be subject to change depending on the COVID situation.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	BIM and Virtual Design in Construction
Third week	3D Modeling 1
Fourth week	3D Modeling 2
Fifth week	3D Modeling 3
Sixth week	Tutorials: Villa Savoye
Seventh week	Midterm Project
Eighth week	Special Lectures: 2D to 3D
Ninth week	BIM-based Quantity Takeoff
Tenth week	BIM-based Cost Estimation
Eleventh week	BIM-based Time Management
Twelfth week	MS Project
Thirteenth week	4D modeling: Navisworks
Fourteenth week	Final Project 1
Fifteenth week	Final Project 2
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Construction Economics	Course Number	0011146001
Major / School Year	Major of Architectural Engineering / 4	completion division / Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 구충완	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-607:화(2B-3),수(5B-6)]
Office hours	별도공지	lecture room	

[1] Outline / Purpose

1. Understanding of the fundamental knowledge of engineering economics in construction
2. Understanding of the life-cycle economic appraisal in the future city construction management
3. Understanding of the financial model in real estate development business

[2] Course Learning Outcomes

This course will provide a general understanding of engineering economics in construction (e.g., process, regulations, finance, feasibility study, and data analytics). When entering the field of business, students will be the experts who can perform effective project management with the expertise of engineering economics in construction.

[3] Class Delivery Method

1. Lecture : Theory of engineering economics in construction
2. Tutorial : Practice of engineering economics in construction
3. Evaluation: Examination (mid-term/final), attendance

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	0 %	0 %	40 %	10 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %

[4] Grading Policies

[Evaluation]

1. Mid-term exam (40%), Final exam (40%)
2. Recommended list of material that students can bring to the examination venue: Electronic calculators

[Attendance]

1. Deduction of 1 point out of 20 points by absence
2. 3 late arrivals equal to 1 absence
3. For more than 4 absences, attendance score will be zero point

③ Percentage of grade evaluation

Exam	Attendance	Assignment
80 %	20 %	0 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Dellisola, A. J.; Kirk, S. J.	Publisher	Reed Construction	Textbook	Life cycle costing for facilities	Issued year	2003
(2)	Author	Daniel W. Halpin, Bolivar A. Senior, & Gunnar Lucko	Publisher	Wiley	Textbook	Construction Management 5th Edition	Issued year	2017
(3)	Author	Jeong, Y.S	Publisher	Buyonsa	Textbook	Real Estate Development Planning and Practice	Issued year	2019

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	* Topic: Orientation & engineering economics in construction * Contents: Main concept of engineering economics in construction * Source: Handout
Second week	* Topic: Project economic appraisal (1/3) * Contents: Project economic appraisal, fundamentals of life cycle cost analysis (LCCA) * Source: Handout
Third week	* Topic: Project economic appraisal (2/3) * Contents: Engineering economic analysis method, Engineering economic analysis method (payback period, ROI, NPV, SIR) * Source: Handout
Fourth week	* Topic: Project economic appraisal (3/3) * Contents: Alternative analysis, case study of distributed solar generation system * Source: Handout
Fifth week	* Topic: Construction project cash flow (1/2) * Contents: Main concept of cash flow (S curve, progress report) * Source: Handout
Sixth week	* Topic: Construction project cash flow (2/2) * Contents: Main concept of cash flow (retainage, cost/benefit) * Source: Handout
Seventh week	* Topic: Tutorial – Project economic appraisal & cash flow * Contents: Summary and feedback with subject examiner * Source: Handout
Eighth week	* Topic: Mid-term exam (out of 40) * Contents: Cumulative scope (2–7 weeks) * Source: Handout
Ninth week	* Topic: Real estate development business * Contents: The process of real estate development business and architectural design process * Source: Handout
Tenth week	* Topic: Feasibility study in real estate development business * Contents: Financial analysis for feasibility study (asset management, cost and revenue, modeling) * Source: Handout
Eleventh week	* Topic: Feasibility analysis process & spreadsheet design (best practice top tips) * Contents: IRR (internal rate of return), NPV (net present value), and spreadsheet design * Source: Handout
Twelfth week	* Topic: Practice – Financial model for real estate * Contents: Regulations, Finance, PL (profit & loss), CF (cash flow), and IRR (internal rate of return) * Source: Handout
Thirteenth week	* Topic: Tutorial – Simplified financial model for real estate (1/2) * Contents: Financial analysis for feasibility study in real estate development business * Source: Handout
Fourteenth week	* Topic: Tutorial – Simplified financial model for real estate (2/2) * Contents: Financial analysis for feasibility study in real estate development business * Source: Handout
Fifteenth week	* Topic: Final exam (out of 40) * Contents: Cumulative scope (9–14 weeks) * Source: Handout
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Design Studio3	Course Number	0006630001
Major / School Year	Major of Architecture and Urban Design / 3	completion division / Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 유영수	Grades/Lecture/ Practice	4 / 0 / 8
Phone Number		A weekday / class /	[28-604: 화(1)(2)(3)(4), 금(6)(7)(8)(9)]
Office hours		lecture room	

[1] Outline / Purpose

Design Studio 3 is concerned with public facilities for a community. Among them, libraries, small-scale performance, exhibition and sports facilities, and cultural centres for children, youth and the elderly are the social infrastructure at the neighbourhood level that provide opportunities for everyone to acquire knowledge, enjoy culture and develop in various ways throughout their lives, while also being the central public spaces of communities where various forms of care and direct and indirect social interaction take place. These public institutions are a kind of platform for introducing a variety of programmes that take into account socio-economic changes, such as population changes, as well as changes in family life and leisure culture. The students have to organise the different programmes and functions needed for the community, based on an analysis of the humanistic, social and spatial conditions of the residential areas around the target site.

In addition, Design Studio 3 considers how our cities should change the way they provide and operate public facilities in response to the demographic changes in our society. The irrational situation of excess and shortage of public facilities is exacerbated by low birth rates, ageing populations and uneven urban (re)development. It is therefore necessary to reorganise public facilities that were previously provided separately for different purposes, such as education, culture, welfare and leisure. The flexible use of existing facilities and the integration of multiple functions are ways to make efficient use of public resources. Therefore, this studio is carrying out a project to create space for the newly proposed programmes, while maintaining some of the existing public facilities. It is not a discontinuous plan that completely demolishes existing buildings and builds new ones, but rather a continuous plan that adds value to the current space. To this end, different options can be chosen and combined, including partial demolition, retention, modification and extension. (PC2 환경의 지속가능성)

[2] Course Learning Outcomes

학생수가 줄어 들고 있는 인천시의 저층주거지 내 초등학교 일부에 커뮤니티 시설을 계획하되 소생활권 범위의 도시 환경 및 인구학적 특성, 기존 커뮤니티 시설 등을 체계적으로 분석하여 잠재적 이용자, 세부 프로그램, 주변 저층주거지 내 오픈스페이스이자 공공공간으로서의 역할 등을 고려한 대지 계획과 공간 전략을 제안한다. (SPC6 대지와 외부공간계획)

공공시설로서 모든 이용자의 시설 접근과 건물 내 이동, 자유롭고 자율적인 이용을 보장하기 위한 설계적 해법과 관련 법령의 기준을 이해하고 적용한다. (SPC7 안전설계)

사회적 수요가 달라진 기존 구조물의 활용 타당성을 공간 구조적 특성과 더불어 환경적 윤리성의 차원에서 판단하고 합리적인 활용 전략을 제시한다. (PC2 환경의 지속가능성)

[3] Class Delivery Method

3 Steps - Research / Project Proposal / Design

1) Research:

- Investigate and analyze the site and existing building, and the neighborhood community
- Identify the potential user group and their requirements
- Assess the potential of the site and specify the spatial conditions to be considered

2) Project Proposal:

- From the findings of 1st step Research and case studies, to suggest the main idea and strategies for the project
- To figure out the range of the project, space program and size, and detailed design conditions

3) Design:

- Conceptual Design - the layout of site, mass plan, program and spatial organization
- Design Development

④ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
10 %	0 %	0 %	80 %	0 %	0 %	10 %	0 %

⑤ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	10 %	0 %	90 %	0 %

[4] Grading Policies

④ Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Provided materials	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

1. Community Links(2020). Being in a Good Place: Investing in Social Infrastructure,Community Links.
(<https://s41967.pcdn.co/wp-content/uploads/Good-Place-Report-1-1.pdf>)
(More publications: www.community-links.org/policy-learning/publications)
2. Studio Gang Architects(2016).Civic Commons: Reimagining Our Cities Public Assets
<https://studiogang.com/publication/civic-commons>
3. AURI(2017~). 좋은 공공건축 시리즈 (<https://npbc.auri.re.kr/publication/page02>)
<01 우리 함께 만드는 공공도서관>, <02 독립 음악인의 창작공간>, <03 모두가 함께 만든 아이들의 두 번째 집, 04 청소년의 꿈을 담은 사랑방>

[6] Weekly lesson plans

First week	Studio 3 Introduction - Introduce the theme and purpose of the course and schedule - Brief the purpose and methods of case studies and site analysis Research 1 - Case study 1 remodeling project cases - Field Trip: site and cases
Second week	Research 2 - Case study 2: program cases - Site analysis: the neighborhood community and site
Third week	Research 3 - Presentation of site analysis: the existing building spatial organization, structure, materials Project Proposal 1 - Design concept of project from user characteristics, proposal and re-interpretation of program, identity of space and place
Fourth week	Project Proposal 2 - Identify of Project: social function, space program, scale - Set the main design conditions
Fifth week	Conceptual Design 1 - Site layout, remodeling strategies of existing structure - Spatial strategies - Conceptual model and diagrams
Sixth week	Conceptual Design 2 - Mass studies, development spatial organization - Study model and schematic plan and section
Seventh week	Mid-term Review
Eighth week	Lecture: Barrier-free Design Guideline
Ninth week	Design Development 1 - Develop site layout plan - Develop plan and section design
Tenth week	Design Development 2 - Develop detail program, plan and section design - Check and apply barrier-free design guideline
Eleventh week	Design Development 3 - Review structural plan and modify plan and section - Develop elevation and material design
Twelfth week	Design Development 4 - Detail design of main space
Thirteenth week	Preparation of presentation 1 - Final diagrams and drawings review
Fourteenth week	Preparation of presentation 2 - Panel layout and final model - 3D images

Fifteenth week	Term Review
Sixteenth week	Submission of Portfolio

[7] Assignments

The first assignment	assignment	Mid-term Review	submission date	2025-04-18 Fri
	purpose			
	procedure & notice	The submission date may be changed later. The format of the submission materials will be announced at a later date.		
	references			
The second assignment	assignment	Term Review	submission date	2025-06-20 Fri
	purpose			
	procedure & notice	The submission date may be changed later. Submission materials – Panels: 3 A1 sheets, Models: within 1 m in width		
	references			
The third assignment	assignment	Barrier Free Design Report	submission date	2025-06-20 Fri
	purpose			
	procedure & notice	Compose in accordance with the format provided on e-learning and attach it to <Student Portfolio>.		
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Sustainable Urbanism	Course Number	0006673001
Major / School Year	Major of Architecture and Urban Design / 3	completion division / Grade evaluation	/
Department/Professor	Division of Architecture & Urban Design / 김한규	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[28-501:월(5B-6),목(2B-3)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	COMPARATIVE ANATOMY	Course Number	BD06026001
Major / School Year	Major of Biological Sciences / 3	completion division / Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Neurobiology	Course Number	0001661001
Major / School Year	Major of Biological Sciences / 4	completion division / Grade evaluation	/
Department/Professor	Division of Life Sciences / 권형욱	Grades/Lecture/Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[31-108:월(8B-9),화(8B-9)]
Office hours			

[1] Outline / Purpose

This course is to help the students find the basic and various characteristics in neuroscience that can be used as the basis for future research and creative thinking, providing students new ideas of applications and techniques. Students will have term-paper assignment, which is allocated to 60% of total grades in this semester.

[2] Course Learning Outcomes

Students can actively search and organize the ideas on neuroscience and will be able to apply basic ideas to applications to other education and research areas.

[3] Class Delivery Method

PPT, Discussion, Student projects and presentation

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	50 %	0 %	20 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	70 %	0 %	0 %	0 %	0 %	30 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Bear et al	Publisher	Wolters & Kluwer	Textbook	Neuroscience: Exploring the Brain, 4th Ed	Issued year	2016
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation: Due to corona virus issues, orientation will be delivered by text messages and email.
Second week	Neuroscience: Past, Present, and Future
Third week	Neurons and Glia
Fourth week	The Neuronal Membrane at Rest
Fifth week	The Action Potential, Synaptic Transmission
Sixth week	Neurotransmitter Systems
Seventh week	The Structure of the Nervous System
Eighth week	Mid-term exam-Replaced with Term Paper Preparation
Ninth week	The Chemical Senses
Tenth week	Visual System, Somatic Sensory System. and other Sensory Systems
Eleventh week	Chemical Control of the Brain and Behavior Spinal Control of Movement, Brain Control of Movement
Twelfth week	Brain and Consciousness Learning and Memory, Brain Disorders
Thirteenth week	Student Term-Paper Presentation I
Fourteenth week	Student Term-Paper Presentation II
Fifteenth week	Final Exam (To be announced) – June 25
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Neuroscience	Course Number	0011522001
Major / School Year	Major of Molecular and Medical Science / 3	completion division / Grade evaluation	/
Department/Professor	Division of Life Sciences / 김재근	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[31-108:월(2B-3),수(2B-3)]
Office hours			

[1] Outline / Purpose

Neurobiology?is the study of cells of the nervous system and the organization of these cells into functional circuits that process information and mediate behavior.

[2] Course Learning Outcomes

1. Understand of basic conception in Neurobiology
2. Understand of integrated physiology associated with nervous system
3. Understand of development of diseases related to nervous system
4. Thinking about application and treatment for Neurological diseases

[3] Class Delivery Method

1. Class will be conducted in forms of b-learning (Online and Offline parallel class).
2. Online (2hour): Learn background of Neurobiology
3. Offline (1hour): Discuss about the learning contents by various ways
4. Class will be conducted as an English class.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
50 %	30 %	10 %	%	%	%	%	10 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	%	50 %	%	%	%	%	30 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Mark F. Bear	Publisher	Lippincott Williams & Wilkins	Textbook	Neuroscience Exploring the brain (4TH edition)	Issued year	
(2)	Author	Cindy L. Stanfield	Publisher	라이프사이언스 (PEASON)	Textbook	Principles of Human Physiology	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation
Second week	History of neuroscience and introduction of neurobiology class
Third week	Types and characters of cell in nervous system
Fourth week	Action potential
Fifth week	Synaptic transmission
Sixth week	Pattern of signal transduction in nervous system
Seventh week	Neurotransmitter
Eighth week	Midterm exam
Ninth week	Chemical regulation of brain behavior
Tenth week	Dopamine
Eleventh week	Brain structure and Ventricle system
Twelfth week	Brain mechanism for the emotion
Thirteenth week	Hypothalamus and Autonomic nervous system
Fourteenth week	Brain diseases
Fifteenth week	Mental illness
Sixteenth week	Final exam

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to biopharmaceuticals	Course Number	0008813001
Major / School Year	Major of Molecular and Medical Science / 4	completion division / Grade evaluation	/
Department/Professor	Division of Life Sciences / 봉지홍	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[31-108:월(5B-6),화(5B-6)]
Office hours			

[1] Outline / Purpose

최근 20년 동안 우리는 많은 사회적인 이슈에서 기술혁신을 경험하였다. 의약품계의 기술혁신은 코로나 팬데믹을 지나면서 매우 빨라졌으며, 그 선두에 mRNA 백신, 항체의약품 등 바이오의약품이 자리하고 있다. 하지만 배우는 사람의 입장인 우리는 바이오의약품에 대한 직접적인 면만을 접할 수 밖에 없고, 큰 흐름을 보지 못하는 경우가 많다. 따라서 본 강좌는 1) 수강생들이 다양하게 접하는 지식을 바탕으로 바이오의약품의 가장 큰 특징에 대한 설명, 2) 바이오의약품에 대한 각자만의 비전을 확립하는 것을 목표로 한다.

[2] Course Learning Outcomes

본 강좌는 1) 수강생들이 다양하게 접하는 지식을 바탕으로 바이오의약품의 가장 큰 특징에 대한 설명, 2) 바이오의약품에 대한 각자만의 비전을 확립하는 것, 3) 기타 다양한 바이오의약품의 지식 전달을 목표로 한다. 특히, 제작공정의 관점에서 바이오의약품을 바라보고 원료 생산 시스템, 분석기술, 제형 등에 대한 지식을 전달한다. 또한 최근 바이오의약품 관련 소송 사례 등을 살펴봄으로써 앞서 설명한 지식에 대한 공감을 유도하고, 올바른 가치관을 다지는 시간을 갖는다.

[3] Class Delivery Method

수업은 출석 20 %, 과제 20 %, 기말고사 60 %로 구성되며 중간고사는 없다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	김홍진, 남두현, 최준석 외	Publisher	라이프사이언스	Textbook	바이오의약품학 제 2판	Issued year	2022
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	서도정홍	Publisher	신일서적	Textbook	바이오의약품: 개발의 기초부터 차세대 의약품까지	Issued year	2015
(2)	Author	이형기, 김시연, 김희주	Publisher	청년의사	Textbook	바이오의약품의 시대가 온다	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction - 수강 시 준비해야 할 내용 - 평가 기준 등의 공지사항
Second week	바이오횰약품의 특성: 혼합물과 생산공정 - Chemical drug와 다른 Biopharmaceuticals의 특징을 공부함.
Third week	바이오횰약품의 약동학적 성상 - Chemical drug와 다른 Biopharmaceuticals의 특징을 공부함.
Fourth week	바이오횰약품 원료생산 시스템: 박테리아부터 동물세포까지 - Chemical drug와 다른 Biopharmaceuticals의 생산 과정을 공부함. - 각 생산 시스템의 특징과 장단점을 공부함.
Fifth week	바이오횰약품 분석기술 - Downstream 공정의 마지막인 물성분석과 QC과정을 공부함.
Sixth week	바이오횰약품의 안정화와 제형 바이오횰약품의 규제쟁점: 사법상의 분쟁을 중심으로 - 약동학적 조절을 위한 Biopharmaceuticals의 안정화/제형을 공부함. - Biopharmaceuticals의 허가 기준/특허 조건 달라진 이유와 이에 따른 분쟁을 공부함.
Seventh week	항체 의약품 - 다양한 항체 의약품 최신 기술들의 변화 과정을 공부함.
Eighth week	중간고사 주
Ninth week	약물전달 기술과 나노입자 - 다양한 약물 전달 입자들의 장단점과 발전 과정을 공부함,
Tenth week	어린이날(5/5) 및 대체공휴일
Eleventh week	유전자치료제와 세포치료제 - 다양한 유전자 치료제들의 장단점과 발전 과정을 공부함,
Twelfth week	백신과 면역증강제 - 다양한 상용화 백신과 백신 후보물질들의 장단점과 발전 과정을 공부함,
Thirteenth week	기타 바이오횰약품 (1)
Fourteenth week	기타 바이오횰약품 (2)
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	GENERAL CHEMISTRY(1)	Course Number	XAA1184006
Major / School Year	Division of Bioengineering / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of Chemistry / 그레고리 아 이작 피터슨	Grades/Lecture/ Practice	2 / 2 / 0
Phone Number		A weekday / class / lecture room	[29-211:월(5)(6)]
Office hours			

[1] Outline / Purpose

- To understand the main concepts of modern chemistry and several basic principles of chemistry.
- To prepare the foundation of chemistry for application in various fields, and to cultivate understanding and research ability of various chemical phenomena.

[2] Course Learning Outcomes

- Understand various definitions and concepts related to chemistry.
- Learn about the development of chemistry and the role of chemistry in the future.
- Acquire sufficient basic knowledge of chemistry to prepare for the future considering the connection with other disciplines.

[3] Class Delivery Method

- The class is scheduled to be held offline, with face-to-face lectures.
- Lectures will be recorded for study purposes or for making up for absences.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
90 %	0 %	0 %	10 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	90 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm exam 30%
Final exam 30%
Assignments = Quizzes 20%
Attendance 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Robinson, McMurtry, Fay	Publisher	Pearson	Textbook	Chemistry, 8th Edition, Global Edition	Issued year	2021
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	–Introduction to General Chemistry –Chapter 1: Chemical Tools – Experimentation and Measurement P
Second week	–Chapter 1: Chemical Tools – Experimentation and Measurement continued –Chapter 2: Atoms, Molecules, and Ions
Third week	–Chapter 2: Atoms, Molecules, and Ions continued –Chapter 3: Mass Relationships in Chemical Reactions
Fourth week	–Chapter 3: Mass Relationships in Chemical Reactions continued –Chapter 4: Reactions in Aqueous Solution
Fifth week	–Chapter 4: Reactions in Aqueous Solution continued
Sixth week	–Chapter 5: Periodicity and the Electronic Structure of Atoms
Seventh week	–Chapter 5: Periodicity and the Electronic Structure of Atoms continued –Mid-term Exam Review
Eighth week	Mid-Term Exam
Ninth week	–Chapter 6: Ionic Compounds – Periodic Trends and Bonding Theory
Tenth week	–Chapter 7: Covalent Bonding and Electron-Dot Structures
Eleventh week	–Chapter 7: Covalent Bonding and Electron-Dot Structures continued –Chapter 8: Covalent Compounds – Bonding Theories and Molecular Structure
Twelfth week	–Chapter 8: Covalent Compounds – Bonding Theories and Molecular Structure continued
Thirteenth week	–Chapter 9: Thermochemistry: Chemical Energy
Fourteenth week	–Chapter 9: Thermochemistry: Chemical Energy continued –Final Exam Review
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Quizzes	submission date	
	purpose	To make sure student is keeping up with the material		
	procedure & notice	Held in class.		
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	GENERAL CHEMISTRY(1)	Course Number	XAA1184007
Major / School Year	Division of Bioengineering / 1	completion division / Grade evaluation	/
Department/Professor	Dept. of Chemistry / 그레고리 아 이작 피터슨	Grades/Lecture/ Practice	2 / 2 / 0
Phone Number		A weekday / class / lecture room	[29-311:수(5)(6)]
Office hours			

[1] Outline / Purpose

- To understand the main concepts of modern chemistry and several basic principles of chemistry.
- To prepare the foundation of chemistry for application in various fields, and to cultivate understanding and research ability of various chemical phenomena.

[2] Course Learning Outcomes

- Understand various definitions and concepts related to chemistry.
- Learn about the development of chemistry and the role of chemistry in the future.
- Acquire sufficient basic knowledge of chemistry to prepare for the future considering the connection with other disciplines.

[3] Class Delivery Method

- The class is scheduled to be held offline, with face-to-face lectures.
- Lectures will be recorded for study purposes or for making up for absences.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
90 %	0 %	0 %	10 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	90 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm exam 30%

Final exam 30%

Assignments = Quizzes 20%

Attendance 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Robinson, McMurry, Fay	Publisher	Pearson	Textbook	Chemistry, 8th Edition, Global Edition	Issued year	2021
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	–Introduction to General Chemistry –Chapter 1: Chemical Tools – Experimentation and Measurement P
Second week	–Chapter 1: Chemical Tools – Experimentation and Measurement continued –Chapter 2: Atoms, Molecules, and Ions
Third week	–Chapter 2: Atoms, Molecules, and Ions continued –Chapter 3: Mass Relationships in Chemical Reactions
Fourth week	–Chapter 3: Mass Relationships in Chemical Reactions continued –Chapter 4: Reactions in Aqueous Solution
Fifth week	–Chapter 4: Reactions in Aqueous Solution continued
Sixth week	–Chapter 5: Periodicity and the Electronic Structure of Atoms
Seventh week	–Chapter 5: Periodicity and the Electronic Structure of Atoms continued –Mid-term Exam Review
Eighth week	Mid-Term Exam
Ninth week	–Chapter 6: Ionic Compounds – Periodic Trends and Bonding Theory
Tenth week	–Chapter 7: Covalent Bonding and Electron-Dot Structures
Eleventh week	–Chapter 7: Covalent Bonding and Electron-Dot Structures continued –Chapter 8: Covalent Compounds – Bonding Theories and Molecular Structure
Twelfth week	–Chapter 8: Covalent Compounds – Bonding Theories and Molecular Structure continued
Thirteenth week	–Chapter 9: Thermochemistry: Chemical Energy
Fourteenth week	–Chapter 9: Thermochemistry: Chemical Energy continued –Final Exam Review
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Quizzes	submission date	
	purpose	To make sure student is keeping up with the material		
	procedure & notice	Held in class.		
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Bioengineering Capstone Design	Course Number	0012010001
Major / School Year	Major of Bioengineering / 4	completion division / Grade evaluation	/
Department/Professor	Division of Bioengineering / 김은정	Grades/Lecture/ Practice	3 / 2 / 2
Phone Number		A weekday / class / lecture room	[29-302:화(9)(011)] [29-505:목(9)(011)]
Office hours			

[1] Outline / Purpose

The class aims for developing the ability of each attendee as follows;

- The experiments in the fields of bioengineering
- How to analyze the data from the experimental results
- How to read and understand the results published in the journals
- How to present the results

[2] Course Learning Outcomes

Develop self-disciplines for experimental design & techniques for bioengineering applications.

[3] Class Delivery Method

Everyone in the class will prepare the presentation and present their own results or theoretical study.

All the presentations should be written and spoken in English, with no exceptions.

Draft of the thesis should be submitted at the end of the semester."

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Experimental Design 1
Third week	Experimental Design 2
Fourth week	Experiments (individual) 1
Fifth week	Experiments (individual) 2
Sixth week	Experiments (individual) 3
Seventh week	Experiments (individual) 4
Eighth week	Experiments (individual) 5
Ninth week	Experiments (individual) 6
Tenth week	Experiments (individual) 7
Eleventh week	Experiments (individual) 8
Twelfth week	Experiments (individual) 9
Thirteenth week	Oral Presentation 1
Fourteenth week	Oral Presentation 2
Fifteenth week	Oral Presentation 3
Sixteenth week	Thesis submission

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Bioengineering Capstone Design	Course Number	0012010002
Major / School Year	Major of Bioengineering / 4	completion division / Grade evaluation	/
Department/Professor	Division of Bioengineering / 양기석	Grades/Lecture/ Practice	3 / 2 / 2
Phone Number		A weekday / class / lecture room	[29-302:목(9)(011)] [29-505:화(9)(011)]
Office hours			

[1] Outline / Purpose

The class aims to develop the ability of each attendee as follows:

The experiments in the fields of bioengineering

How to analyze the data from the experimental results

How to read and understand the results published in the journals

[2] Course Learning Outcomes

After selecting the research projects related to bioengineering fields, the students should conduct the experiments under the guidance of the principal investigator. Thereafter, the students can analyze the research results and write the thesis.

[3] Class Delivery Method

Everyone in the class will prepare the presentation and present their own results or theoretical study.

All the presentations should be written and spoken in English with no exception.

The draft of the thesis should be submitted at the end of the semester.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
10 %	30 %	30 %	20 %	0 %	0 %	0 %	10 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Paperwork and experiments
Third week	Paperwork and experiments
Fourth week	Paperwork and experiments
Fifth week	Paperwork and experiments
Sixth week	Paperwork and experiments
Seventh week	Paperwork and experiments
Eighth week	Paperwork and experiments
Ninth week	Paperwork and experiments
Tenth week	Paperwork and experiments
Eleventh week	Paperwork and experiments
Twelfth week	Paperwork and experiments
Thirteenth week	Oral Presentation 1
Fourteenth week	Oral Presentation 2
Fifteenth week	Oral Presentation 3
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Biomaterials and Tissue Engineering	Course Number	0005908001
Major / School Year	Major of Bioengineering / 4	completion division / Grade evaluation	/
Department/Professor	Division of Bioengineering / 양기석	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[29-311:화(5B-6)] [29-507:수(4-5A)]
Office hours			

[1] Outline / Purpose

A review of the fundamental principles involved in the design of engineered tissues and organs with the aid of various stem cells is provided. The course aims to explore efficient and sufficient tissue regenerative medical applications through the study of fundamental information about tissue engineering and stem cell research.

[2] Course Learning Outcomes

The purpose of this course is to provide an in-depth exploration of cutting-edge stem cell sciences, degradable and implantable biomaterials, various polymeric materials, drug delivery strategies, artificial organs, 3D printing techniques, and biomedical engineering applications. In addition to covering the principles of cell/molecular biology and anatomy, the course will also delve into various in vivo animal studies.

[3] Class Delivery Method

Lecture (60%) + Discussion (including presentation) (40%)

The course format may be subject to changes based on the number of students and the prevailing circumstances.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	슬라이드	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Robert Lanza, Robert Langer, Joseph Vacanti	Publisher	Academic press	Textbook	Principles of tissue engineering 3rd edition	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Regenerative Medicine
Third week	Stem Cell Biology I
Fourth week	Stem Cell Biology II
Fifth week	Biomaterials in tissue engineering I
Sixth week	Biomaterials in tissue engineering II
Seventh week	Control of tissue development
Eighth week	Tissue engineering Cardiovascular and neural tissues
Ninth week	Tissue engineering Musculoskeletal and skin tissues
Tenth week	Tissue engineering Endocrine tissues (5/6 Designated substitute holiday)
Eleventh week	Midterm exam
Twelfth week	Engineering design
Thirteenth week	Engineering design – presentation I
Fourteenth week	Engineering design – presentation II
Fifteenth week	Engineering design – presentation III
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Genetic Engineering	Course Number	0001653001
Major / School Year	Major of Bioengineering / 4	completion division / Grade evaluation	/
Department/Professor	Division of Bioengineering / 황병희	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[29-403:수(7)(8)] [29-505:월(3)]
Office hours			

[1] Outline / Purpose

This course will introduce modern techniques for genetic engineering. Students will learn cutting-edge molecular genetic engineering. Lectures will start with the basics of genetic engineering, the methodology of gene manipulation, and the applications of genetic engineering with specific additional topics of recent development. Molecular biology is a prerequisite for the course.

[2] Course Learning Outcomes

The primary goal of this course is to introduce the concepts and practice of genetic engineering, with emphasis more on engineering than on genetics. Knowledge of Molecular Biology will be helpful in understanding the principle of various methodologies used in genetic engineering. Upon the completion of this course, students shall be able to:

- Understand the basics of genetic engineering
- Learn different methodologies in genetic engineering
- Design and fabricate a desired construct and exp

[3] Class Delivery Method

Lectures are to be given twice a week for three hours in English. Topics for discussion and assignments would be given to students for specific subjects. Students are to survey recent progress in genetic engineering and give a presentation about the subjects after the mid-term of the semester. Reports and examinations are supposed to be handed out in Korean.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	0 %	0 %	0 %	0 %	0 %	20 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	90 %	0 %	10 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	T.A. Brown	Publisher	Wiley-Blackwell	Textbook	Gene Cloning & DNA Analysis 6th edition	Issued year	2010
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	D. Freifelder & G. M	Publisher		Textbook	Essentials of Molecular Biology	Issued year	
(2)	Author	B. Lewin	Publisher		Textbook	Gene VI	Issued year	
(3)	Author		Publisher		Textbook	Essentials of Genetics	Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to the course
Second week	Overview of molecular biology & its application to genetic engineering
Third week	Gene Cloning: Strategy and Vectors
Fourth week	Gene Cloning: DNA purification
Fifth week	Gene Cloning: Enzymes for DNA Manipulation and electrophoresis
Sixth week	Gene Cloning: Transformation
Seventh week	Gene Cloning: An Example Study
Eighth week	Midterm Exam
Ninth week	DNA sequencing analysis
Tenth week	Presentation
Eleventh week	Presentation
Twelfth week	Gene Cloning: Protein Expression
Thirteenth week	Protein analysis
Fourteenth week	LMO and Gene therapy
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Survey of Current Technology in Genetic Engineering	submission date	
	purpose			
	procedure & notice	Search for experimental methods developed recently based on the lectures and choose one of them for presentation to the class		
	references			
The second assignment	assignment	Presentation of Current Technology of Interest	submission date	
	purpose			
	procedure & notice	● Prepare PPT for current technology of interest and present it to the class at the end of the semester. ● 15 min presentation and 5 min Q&A per person		
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Brain Engineering	Course Number	0005845001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	Division of Bioengineering / 양성구	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[29-210:화(8B-9),수(2B-3)]
Office hours			

[1] Outline / Purpose

본 교과목은 뇌가 어떻게 세상을 인지하고 반응하는지에 관한 현상을 학습하는 과목으로 공학 기반의 신경과학 이해를 목적으로 한다.

[2] Course Learning Outcomes

본 강좌를 통해서 수강학생들이 미래산업으로 신경과학 및 공학의 중요성을 인식하고 신경과학의 폭넓은 이해와 신경질환 치료를 위한 공학적인 기술을 학습하는 것에 있다.

[3] Class Delivery Method

본 강좌는 16주간 동안 뇌공학에 관한 강의를 수강하고, 수업중간에 요약 및 질의응답방식으로 진행한다. 대부분 시간을 시청각교육에 중점을 두고 진행한다. 필요에 따라 외부강사초청도 적극 활용한다. 16주간 영어강의로 진행되며 필요에 따라 한국어 강의로 요약을 할 수 있다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	10 %	0 %	0 %	10 %	10 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	0 %	0 %	10 %	0 %	80 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
80 %	20 %	0 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Bear et al	Publisher	Wolters Kluwer	Textbook	Neuroscience: Exploring the Brain (4th edition)	Issued year	2016
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to the Brain Engineering
Second week	Neuron and Glia
Third week	The structure of the nervous system
Fourth week	The action potential
Fifth week	The neuronal membrane at rest
Sixth week	Synaptic transmission
Seventh week	Molecular mechanisms of learning and memory
Eighth week	Mid term exam
Ninth week	Memory
Tenth week	Brain rhythms and Sleep
Eleventh week	Neural interface devices
Twelfth week	Auditory and visual system
Thirteenth week	Brain control of movement
Fourteenth week	Motivation & Optogenetics
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Biosensor Engineering	Course Number	0007832001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	Division of Bioengineering / 한상길	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[29-210:월(4-5A),화(2B-3)]
Office hours	13:00 ~ 17:00 (Wednesday, Thursday)	lecture room	

[1] Outline / Purpose

The aim of this course is to introduce cutting-edge biosensor technologies, explore their working mechanisms, and discuss their wide range of applications, from neuroscience to Plantronics. This course is highly recommended for students interested in pursuing the "Biomedical Devices" major track.

[2] Course Learning Outcomes

The objectives of this course are to:

1. Learn the basic principles of various biosensors, including electrophysiology and electrochemical sensors.
2. Explore the broad applications of biosensors in fields such as neuroscience, healthcare, and Plantronics, aiming to foster creative thinking and interdisciplinary skills.
3. Enhance presentation skills, enabling students to effectively communicate their scientific knowledge to diverse audiences.

[3] Class Delivery Method

Lectures will be delivered in English using PPT slides.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
90 %	10 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	90 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Grading Breakdown:

1. Mid-term Exam: 30%
2. Final Exam: 30%
3. Attendance & Class Participation: 20%
4. Team Presentation: 20%
 - The dates for the mid-term and final exams will be announced in class.
 - Team presentations: Groups of 2 students will choose any topic related to biosensors. Each presentation will be 15 minutes, followed by 5 minutes for Q&A.

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Onur Parlak, Anthony P.F. Turner, Alberto Salleo	Publisher	Elsevier	Textbook	Wearable Bioelectronics	Issued year	2020
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to Bioelectronics
Second week	Electrophysiology Techniques
Third week	Brain-Computer Interfaces (BCI)
Fourth week	Organic Electrochemical Transistors
Fifth week	Basics of Electrochemical Sensors
Sixth week	Design Considerations for Glucose Sensors
Seventh week	Team presentation 1
Eighth week	Mid-term exam
Ninth week	Ion-Selective Sensors
Tenth week	Design Considerations for Building Wearable Sensors
Eleventh week	Advanced Biosensing Technologies
Twelfth week	Team presentation 2
Thirteenth week	[Special seminar] – Presenter: Dr. Miguel Boratto – Topic: To be determined
Fourteenth week	[Special topic] – Plantronics (Plant + Electronics)
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	bioelectronics engineering	Course Number	0009525001
Major / School Year	/ 3	completion division /Grade evaluation	/
Department/Professor	Division of Bioengineering / 송영준	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[29-210:월(1-2A),화(7-8A)]
Office hours			

[1] Outline / Purpose

생명공학 중심의 전자 공학 컴퓨터 공학 기술을 살펴 보며 이를 통해 바이오 기술의 발전에 대해 살펴 본다.

[2] Course Learning Outcomes

전자 공학, 컴퓨터 공학, 수학 등을 활용하여 다양한 생명공학의 관한 기술을 이해 하고자 한다.

[3] Class Delivery Method

이론수업 실습 평가 등을 병행하여 수업을 진행 한다

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	수업 안내 및 수업 진행
Second week	TBE
Third week	TBE
Fourth week	TBE
Fifth week	TBE
Sixth week	TBE
Seventh week	TBE
Eighth week	TBE
Ninth week	TBE
Tenth week	TBE
Eleventh week	TBE
Twelfth week	TBE
Thirteenth week	TBE
Fourteenth week	TBE
Fifteenth week	TBE
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Biological Tissue Engineering	Course Number	0010117001
Major / School Year	/ 3	completion division /Grade evaluation	/
Department/Professor	Division of Bioengineering / 송광훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[29-210:화(5B-6),수(1-2A)]
Office hours			

[1] Outline / Purpose

The class will provide basic principles and techniques of tissue engineering. Specifically, students will study biomaterials, tissue scaffolds, cell culture/engineering and regeneration processes.

[2] Course Learning Outcomes

Basic principles of tissue engineering from the class will widen view of bioengineering by delivering practical knowledge.

[3] Class Delivery Method

The class will be given by lecture and slides.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

Midterm exam: 30%

Final exam: 30%

Attendance: 20%

Presentation: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Biomaterials 1 (Fibrin, collagen, gelatin, alginate)
Third week	Biomaterials 2 (Hyaluronic acid, chitosan, dextran, matrigel)
Fourth week	Biomaterials 3 (Agarose, poly(ethylene glycol), poly(caprolactone), poly(D,L-lactic acid-co-glycolic acid))
Fifth week	Cell culture facilities
Sixth week	Cell culture technique, stem cells
Seventh week	Techniques to fabricate tissue scaffolds and culture cells within scaffolds 1 (Solvent casting and particulate leaching, gas forming, electrospinning, cell culture within scaffolds)
Eighth week	Midterm exam
Ninth week	Techniques to fabricate tissue scaffolds and culture cells within scaffolds 2 (Hydrogels, microparticles, solvent evaporation, spray drying, microcarrier, surface modification)
Tenth week	Analysis of biomaterials/tissue scaffolds 1 (1H NMR, contact angle, SEM)
Eleventh week	Analysis of biomaterials/tissue scaffolds 2 (AFM, tensile testing, compressive strength, rheology)
Twelfth week	3D bioprinters, bioprinting techniques
Thirteenth week	Demonstration of hydrogel fabrication and 3D printing or Research applications
Fourteenth week	Student presentation
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	조직공학 연구 발표	submission date	
	purpose			
	procedure & notice	조직공학 관련 실험 논문을 정리하여 5~10분동안 발표		
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Bioimaging Engineering	Course Number	0005903001
Major / School Year	/ 4	completion division /Grade evaluation	/
Department/Professor	Division of Bioengineering / 송광훈	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[29-211:수(7-8A),목(1-2A)]
Office hours			

[1] Outline / Purpose

This class will cover basic principles of various microscopes and imaging techniques developed for researches in bioengineering. Specifically, we will aim to study types/working mechanisms/characteristics of microscopes, staining/imaging techniques and applications in bioengineering.

[2] Course Learning Outcomes

The principles and practical techniques, which will be given in the class, will provide information that students need for performing research projects and widening views in bioengineering.

[3] Class Delivery Method

The class will be given by lecture and slides. (On-site)

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

Midterm exam: 30%

Final exam: 30%

Student presentation: 20%

Attendance: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction, light microscopy, light (1)
Second week	Introduction, light microscopy, light (2)
Third week	Illuminators, filters, lenses
Fourth week	Diffraction limits
Fifth week	Phase contrast, dark-field microscopy
Sixth week	Polarization microscopy, DIC
Seventh week	Fluorescence microscopy
Eighth week	Midterm exam
Ninth week	Confocal microscopy
Tenth week	Two-photon microscopy
Eleventh week	Transmission, scanning electron microscopy
Twelfth week	Image sensor
Thirteenth week	Demonstration of fluorescence microscopy or Research applications
Fourteenth week	Student presentation
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	THEORY OF INTERNATIONAL TRADE	Course Number	KA06169001
Major / School Year	International Commerce and Asian Studies / 2	completion division / Grade evaluation	/
Department/Professor	/ 한도숙	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-224:월(7-8A),화(8B-9)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	The American Economy theory and policy	Course Number	0011568001
Major / School Year	International Commerce and Asian Studies / 2	completion division / Grade evaluation	/
Department/Professor	/ 한도숙	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-219:수(8B-9)] [14-224:화(5B-6)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Econometrics for micro economic data	Course Number	0011569001
Major / School Year	International Commerce and Asian Studies / 2	completion division / Grade evaluation	/
Department/Professor	/ 김지영	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-224:월(2B-3),목(2B-3)]
Office hours			

[1] Outline / Purpose

This course is an advanced level of economic statistics. It studies econometric method to analyze economic data and understand empirical research.

[2] Course Learning Outcomes

It aims to help students understand the statistical analysis tool which varies across the characteristics of economic data.

[3] Class Delivery Method

Lectures

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
67 %	0 %	0 %	33 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Statistics review
Second week	Statistics review
Third week	Simple regression
Fourth week	Simple regression
Fifth week	Multiple regression: Inference
Sixth week	Multiple regression: Asymptotics
Seventh week	Review of regression analysis
Eighth week	Midterm exam
Ninth week	Multiple regression: Dummy
Tenth week	Log model and quadratic model
Eleventh week	Heteroskedasticity
Twelfth week	Limited dependent variable model
Thirteenth week	Endogeneity
Fourteenth week	Review of week 9–13
Fifteenth week	Final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	ENGLISH READING AND WRITING(2)	Course Number	KAD6025001
Major / School Year	International Commerce and Asian Studies / 2	completion division / Grade evaluation	/
Department/Professor	/ Cruz Jr Fidel Richard	Grades/Lecture/ Practice	2 / 0 / 4
Phone Number		A weekday / class / lecture room	[14-218:금(1)(2)] [14-224:수(3)(4)]
Office hours			

[1] Outline / Purpose

The course aims to help students develop their opinions clearly in written form and state them in a logical thesis statement supported by hard data. Moreover, students will extrapolate themes and main ideas from literature and examine concepts about the human condition.

[2] Course Learning Outcomes

Students will develop critical thinking skills to assist them in writing their opinions clearly and with logic.

[3] Class Delivery Method

Using short stories and a novel, students will examine the human condition and how it applies to them. The writing assignments will be based on our readings and class discussion. Students will be encouraged to think independently and use their critical thinking skills to support their opinions.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

The course will require two essays in addition to a midterm and final exam. Each will have a value of 20%. Two essays = 40% Midterm/Final = 40% Attendance = 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
40 %	20 %	40 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	N/A	Issued year	
(2)	Author	Shin Kyung-Sook	Publisher	Vintage	Textbook	Please Look After Mom	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Students will procure selected short stories from the internet.

[6] Weekly lesson plans

First week	Orientation / Rules for writing an academic essay
Second week	The Yellow Wallpaper / Discussion of theme & character
Third week	Lamb to the Slaughter / Discussion of theme & character
Fourth week	The One Who Walk Away From Omelas / Discussion of essay topic
Fifth week	Introduction paragraph due / Standard Loneliness Package (first draft)
Sixth week	Review of main themes and characters (second draft)
Seventh week	Final draft / Review for midterm
Eighth week	Midterm
Ninth week	Please Look After Mom / Discussion
Tenth week	Please Look After Mom / Discussion of themes
Eleventh week	Please Look After Mom / Discussion of themes (2nd essay)
Twelfth week	Please Look After Mom / Discussion of themes (first draft)
Thirteenth week	Please Look After Mom / Discussion of themes (second draft)
Fourteenth week	Review and Discussion (final draft)
Fifteenth week	Final exam
Sixteenth week	Reserved for make-up exams

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	INTERMEDIATE ENGLISH	Course Number	KA06147001
Major / School Year	International Commerce and Asian Studies / 2	completion division / Grade evaluation	/
Department/Professor	/ Cruz Jr Fidel Richard	Grades/Lecture/ Practice	2 / 0 / 4
Phone Number		A weekday / class / lecture room	[14-218:금(8)(9)] [14-224:수(1)(2)]
Office hours			

[1] Outline / Purpose

The course aims to develop critical thinking skills as students express their opinions on contemporary social topics.

[2] Course Learning Outcomes

Students will develop the skill to hold a logical discourse by stating a clear thesis and supporting it with data.

[3] Class Delivery Method

In the lecture, the topic for the day will be introduced. Using videos, articles, literature, etc., students will be subjected to a variety of opinions on the topic promoting and criticizing it. Students will then work in small groups to further discuss the topic, present their opinions, and explain their points of view to the rest of the class.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Students will be evaluated with a midterm and final written exam. Moreover, their grade will be impacted significantly by their level of participation. Midterm & Final - 40% / Homework & Participation 20% / Projects (2) - 20% Attendance 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
40 %	20 %	40 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	N/A	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

All materials will be generated by the professor or students from the internet.

[6] Weekly lesson plans

First week	Orientation / How to confidently express opinions using logic
Second week	The significance of the LGBTQ movement
Third week	Conspiracy Theories – Why do smart people believe unusual things?
Fourth week	Project (Face-to-face discussion with the professor on any of the previous topics)
Fifth week	The media and disinformation
Sixth week	Reproductive rights and access to abortion services
Seventh week	Midterm review
Eighth week	Midterm exam
Ninth week	Online learning vs. Traditional classrooms: What's more effective?
Tenth week	The future of universal basic income
Eleventh week	The future of universal basic income
Twelfth week	Project (Face-to-face discussion with the professor on any topic after the Midterm)
Thirteenth week	TDB
Fourteenth week	Review and final discussion
Fifteenth week	Final exam
Sixteenth week	Reserved for make-up exams

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	The United States of America Economy past present and future	Course Number	0011574001
Major / School Year	International Commerce and / 4 Asian Studies	completion division /Grade evaluation	/
Department/Professor	/ 한도숙	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-219:수(7-8A)] [14-220:월(5B-6)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	RISE	Course Number	0009062079
Major / School Year	/ 전학년	completion division /Grade evaluation	/
Department/Professor	/ 김윤경	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	
Office hours		lecture room	

[1] Outline / Purpose

This specialized course is designed to provide students with comprehensive guidance and support in preparing their graduation theses.

[2] Course Learning Outcomes

Students perform individual research and present their own findings in thesis.

[3] Class Delivery Method

1:1 and Group Meetings

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction Thesis guideline for IBE
Second week	Research Topic
Third week	Citation and Reference guide Writing Process
Fourth week	Structure of Research paper
Fifth week	Literature Review
Sixth week	Literature Review
Seventh week	Data Analysis and Visualization
Eighth week	Data Analysis and Visualization
Ninth week	Creating Tables and Graphs
Tenth week	Thesis Writing
Eleventh week	Thesis Writing
Twelfth week	Thesis Writing
Thirteenth week	Thesis Writing
Fourteenth week	Thesis Writing
Fifteenth week	Final Submission
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Economic Data 1	Course Number	0011541001
Major / School Year	/ 1	completion division / Grade evaluation	/
Department/Professor	/ 김윤경	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-117:화(2B-3),목(4-5A)]
Office hours			

[1] Outline / Purpose

This course introduces the power of data to understand Economic and Social Science Analysis. As we employ Core Economics, a renowned but free economics education resource, we will engage in data projects throughout the first year of IBE. Economic Data 1 covers six projects from climate change to inequality. The course explores fundamental concepts of economic issues and emphasizes data visualization using Excel. *Upper-year students may register the course with the instructor's approval.

[2] Course Learning Outcomes

This course expects to empower students to apply economic analysis and Excel techniques to real-world issues, fostering a deeper comprehension of economic dynamics and social phenomena.

[3] Class Delivery Method

A Blended Course: Letrues(Online) and Lab sessions(Offline)

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

95-100 A+

90-94 A

85-89 B+

80-84 B

75-79 C+

70-74 C

65-69 D+

60-65 D

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Core Team	Publisher	Core Economics	Textbook	Doing Economics	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Core Team	Publisher	Core Economics	Textbook	The Economy	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[6] Weekly lesson plans

First week	Course Orientation
Second week	1: Measuring climate change
Third week	1: Measuring climate change
Fourth week	2: Collecting and analysing data from experiments
Fifth week	2: Collecting and analysing data from experiments
Sixth week	3: Measuring the effect of a sugar tax
Seventh week	3: Measuring the effect of a sugar tax
Eighth week	Midterm Exam
Ninth week	4: Measuring wellbeing
Tenth week	4: Measuring wellbeing
Eleventh week	5: Measuring inequality: Lorenz curves and Gini coefficients
Twelfth week	5: Measuring inequality: Lorenz curves and Gini coefficients
Thirteenth week	6: Measuring management practices
Fourteenth week	6: Measuring management practices
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Self Design Seminar	Course Number	0011097006
Major / School Year	/ 1	completion division / Grade evaluation	/
Department/Professor	/ 정승호	Grades/Lecture/ Practice	1 / 1 / 0
Phone Number		A weekday / class /	[14-220:수(9)]
Office hours		lecture room	

[1] Outline / Purpose

This one-credit course is designed to assist new students in making a successful transition to the International Business Economics (IBE) major, both academically and personally, through engaged experiences. The Self Design Seminar aims to help students connect with various university resources, build future career plans, and gain a deeper understanding of university life and their academic journey. Through numerous discussions and practical advice, students will become well-informed about IBE courses, non-academic activities, and long-term career considerations, ensuring a comprehensive and enriching freshman experience.

[2] Course Learning Outcomes

1. Gain detailed information about SONAS, fellow students, professors, and coursework.
2. Develop and practice skills that contribute to success in college and beyond.
3. Draw detailed personal academic and career plans.
4. Write an essay pertaining to their lifetime goal (Mission Statement)

[3] Class Delivery Method

- Class discussions and 1:1 meetings with the professor
- Assignments

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

-Pass/Fail

-Every student is required to write an essay pertaining to their lifetime goal (Mission Statement). The first draft of the essay is due around the 5th week. The final draft must be submitted no later than the 15th week.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Covey, Stephen R.	Publisher		Textbook	The 7 Habits of Highly Effective People	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation: Information Exchange among the Students
Second week	[Comprehensive Session] Why Are We Here? –Mission of IBE –Course Map –Requirements for Graduation
Third week	How to write a thesis: Format of Citations and References
Fourth week	Creating a Safe Campus: Understanding and Preventing Sexual Harassment and Violence
Fifth week	Habit 1: Be Proactive(from The 7 Habits of Highly Effective People)
Sixth week	Habit 2: Begin with the End in Mind (from The 7 Habits of Highly Effective People)
Seventh week	Habit 3: Put First Things First (from The 7 Habits of Highly Effective People)
Eighth week	Mid-Semester Break –Submission of the 1st Draft of the Mission Statement
Ninth week	Habit 4: Think Win/Win (from The 7 Habits of Highly Effective People)
Tenth week	Habit 5: Seek First to Understand, Then to Be Understood
Eleventh week	Habit 6: Synergize
Twelfth week	Habit 7:Sharpen the Saw(from The 7 Habits of Highly Effective People) –1:1 Meetings with the Professor
Thirteenth week	1:1 Meetings with the Professor
Fourteenth week	1:1 Meetings with the Professor –Submission of the final version of the Mission Statement
Fifteenth week	Group Dinner with Students
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	elementary level of Korean conversation 1	Course Number	0010127001
Major / School Year	/ 1	completion division /Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[14-220:수(2)(3)] [14-224:금(2)]
Office hours			

[1] Outline / Purpose

본 강의는 외국인 유학생들을 대상으로 하는 동북아국제통상학부 2학년 전공 선택 강의이다. 기초적인 한국어를 알고 있는 학생들을 대상으로 한다.

[2] Course Learning Outcomes

초급 수준의 한국어 회화를 가능하게 하는 것이 이 수업의 목표이다. 학생들은 이 강의를 통해 자기소개, 취미, 여행 경험, 문의하기, 권유하기, 허락 구하기 등의 표현을 익힐 수 있다.

[3] Class Delivery Method

basically, i will use korean. but when i need to expain grammar, i will use english.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

midterm exam 30% : interview+paper

final exam 30% : interview+paper

attendance 20% : if your camera is off, or if you are moving or working while class, attendance will not be accepted.

quiz 10% : every lesson, you will have review quiz

homework 10% : everyday work book

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher	서울대학교 언어교육원	Textbook	서울대 한국어 1B Student book	Issued year	
(2)	Author		Publisher	서울대학교 언어교육원	Textbook	서울대 한국어 1B Workbook	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	1A 1~6과 복습
Second week	1A 7과. 날씨와 계절(형용사)
Third week	1A 7과. 날씨와 계절(연결어미)
Fourth week	1A 8과. 여가 활동(제안/약속하기)
Fifth week	1B 9과, 가족, 숫자 3
Sixth week	1B 9과. 높임말
Seventh week	1B 10과. 시간 표현
Eighth week	중간고사
Ninth week	1B 10과, 계획하기(미래시제)
Tenth week	1B 11과. 신체, 증상
Eleventh week	1B 11과. 의무/금지 표현
Twelfth week	1B 12과. 전화하기
Thirteenth week	1B 12과. 이유 말하기
Fourteenth week	1B 13과. 교통, 목적지 이야기하기
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Korean 1	Course Number	0010124001
Major / School Year	/ 1	completion division /Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[14-117:수(6)] [14-224:금(6)(7)]
Office hours			

[1] Outline / Purpose

Learning korean from basic.

this leacture is for the students who does not know korean at all, or very basic level.

[2] Course Learning Outcomes

this lecture starts from the korean alphabet.

you can learn how to read and write korean. also, you will learn basic korean conversation.

[3] Class Delivery Method

the lecture is conducted in english, but if the more words and geammars you learn, the more i will use korean.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	서울대학교 한국어 student book 1A	Issued year	
(2)	Author		Publisher		Textbook	서울대학교 한국어 work book 1A	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	level test/orientation/introduction
Second week	korean alphabet 1
Third week	korean alphabet 2
Fourth week	greetings/nationality
Fifth week	basic nouns(school, class room, room)
Sixth week	baisc verbs(routines, schedule)
Seventh week	place, location, direction
Eighth week	mid term exam
Ninth week	number(1), date and days
Tenth week	past tense, shopping
Eleventh week	numder(2), foods, order in the restaurant
Twelfth week	weather and season
Thirteenth week	irregular forms(ㅁ, ㅂ), basic adjectives
Fourteenth week	suggestion, making appointments
Fifteenth week	final exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Intermediate level of Korean conversation 1	Course Number	0010129001
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[14-117:수(4)] [14-224:금(3)(4)]
Office hours			

[1] Outline / Purpose

This course is an elective course for third year students who majored in the School of Northeast Asian studies. This course is for students who have studied Korean for 6 months or more.

[2] Course Learning Outcomes

This class is level 3 of the Korean Language Proficiency Test and aims to enable natural conversation in Korean. Students can learn about Korean university life, holidays, traditional musical instruments and clothes and marriage culture and learn words and expressions related to them.

[3] Class Delivery Method

ONLY KOREAN. While in class, you can't use cell phones.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

midterm(paper, interview) 30%

final(paper, interview) 30%

attendance 20%

quiz 10%

assignment 10%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Publisher	서울대학교 언어교육원	Textbook	서울대 한국어 2B Student book, Workbook	Issued year	
(2)	Author	Publisher	서울대학교 언어교육원	Textbook	서울대 한국어 3A Student book, Workbook	Issued year	
(3)	Author	Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Publisher		Textbook		Issued year	
(2)	Author	Publisher		Textbook		Issued year	
(3)	Author	Publisher		Textbook		Issued year	
(4)	Author	Publisher		Textbook		Issued year	
(5)	Author	Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	1과.신입상 환영회를 한다고 해요/간접화법
Second week	2과.방을 바꿔 달라고 해 봐
Third week	3과.비가 이렇게 많이 올 줄 몰랐어요
Fourth week	4과.먹어 보니까 맛있던데요
Fifth week	5과.입어 보고 살걸 그랬어요
Sixth week	6과.일요일에는아무 약속도 없어요
Seventh week	7과.꿔다가 다시 켜 보세요
Eighth week	중간고사
Ninth week	8과.교통사고가 났다고요?
Tenth week	9과.한글날에 대해 들어 봤어요?
Eleventh week	3B 책:10과.결혼하려면 아직 멀었어요.
Twelfth week	11과.언제든지 일할 수 있어요
Thirteenth week	12과.운동을 했더니 몸이 좋아졌어요.
Fourteenth week	13과. 지금 입고 있는 양복이 잘 어울려요.
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	INTRODUCTORY ECONOMICS 1	Course Number	0008815001
Major / School Year	/ 2	completion division /Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-117:금(4)(5)(6)]
Office hours			

[1] Outline / Purpose

[2] Course Learning Outcomes

[3] Class Delivery Method

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
%	%	%

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	
Second week	
Third week	
Fourth week	
Fifth week	
Sixth week	
Seventh week	
Eighth week	
Ninth week	
Tenth week	
Eleventh week	
Twelfth week	
Thirteenth week	
Fourteenth week	
Fifteenth week	
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Financial Mathematics	Course Number	0011542001
Major / School Year	/ 2	completion division / Grade evaluation	/
Department/Professor	/ 권재현	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-219:수(5B-6)] [14-220:화(5B-6)]
Office hours	https://sites.google.com/inu.ac.kr/prof-jae-h-gwon/office-hours		

[1] Outline / Purpose

This course introduces essential mathematical tools and techniques for solving problems in business and applied economics. Emphasizing real-world applications, it covers topics such as algebra, calculus, and optimization, equipping students to analyze economic models and make informed business decisions.

[2] Course Learning Outcomes

Students can

1. develop a strong mathematical foundation for economic and business applications;
2. apply algebraic and calculus-based methods to solve economic problems;
3. analyze optimization problems relevant to business decision-making.

[3] Class Delivery Method

This course has no prerequisites; students may enroll without prior approval from the instructor. The course consists of two 1.5-hour sessions each week. The primary mode of instruction is lectures delivered by the instructor.

This course will be managed entirely on Google Classroom, not on the University's course webpage (cyber.inu.ac.kr). After enrollment, students must register for the Google Classroom to access course materials, announcements, and assignments. Registration details will be provided after enrollment.

There will be two major exams during the semester:

1. Midterm Exam (scheduled in the 8th week): Exam date may be subject to change.
2. Final Exam (6/17 in week 16): Please plan your vacation schedule accordingly, as the final exam date is fixed and non-negotiable.

Additionally, there will be a few pop-up quizzes administered at the very beginning of some selected sessions. These quizzes are designed to assess understanding of recent material and typically last no longer than 15 minutes. More information is in <https://sites.google.com/inu.ac.kr/prof-jae-h-gwon/teaching>.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Attendance 20% // Quizzes 20% / Assignments 10% // Midterm 20% / Final 30%

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Carl P. Simon and Lawrence Blume	Publisher	W. W. Norton's & Co.	Textbook	Mathematics for Economists (International Student Edition)	Issued year	1994
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Kevin Wainwright and Alpha C. Chiang	Publisher	McGraw-Hill Education	Textbook	Fundamental Methods of Mathematical Economics (4th edition; international)	Issued year	2005
						A First Course in Calculus (8th		

(2)	Author	Serge Lang	Publisher	Springer	Textbook	edition)	Issued year	1986
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Mathematica & Wolfram Language: Fast Introduction for Math Students (<https://www.wolfram.com/language/fast-introduction-for-math-students/en/>)

Free Online Courses in Khan Academy (<https://www.khanacademy.org>)

[6] Weekly lesson plans

First week	1. (3/4) Course Description 2. (3/5) Basic: Numbers, Functions, and Graphs
Second week	1. (3/11) Differentiability and Continuity 2. (3/12) Application
Third week	1. (3/18) Chain Rule and Inverse Function 2. (3/19) Sine, Cosine, Exponents, and Logarithms * Quiz 1
Fourth week	1. (3/25) Systems of Linear Equations and Introduction to Linear Algebra 2. (3/26) Vector and Matrix Algebra
Fifth week	1. (4/1) Vector Space 2. (4/2) Subspaces and Important Operators * Quiz 2
Sixth week	1. (4/8) Eigenvalue and Eigenvector 2. (4/9) Limits and Open Sets
Seventh week	1. (4/15) Functions of Several Variables 2. (4/16) Calculus of Several Variables * Quiz 3
Eighth week	1. (4/22) No Session (Exam Preparation) 2. (4/23) Midterm Examination
Ninth week	1. (4/29) Integration 2. (4/30) Fundamental Theorems of Calculus
Tenth week	1. (5/6) Unconstrained Optimization: Theory 2. (5/7) Unconstrained Optimization: Application * Quiz 4
Eleventh week	1. (5/13) Constrained Optimization: Theory 2. (5/14) Constrained Optimization: Application
Twelfth week	1. (5/20) Homogeneous and Homothetic Functions 2. (5/21) Concave and Convex Functions * Quiz 5
Thirteenth week	1. (5/27) Useful Inequalities 2. (5/28) Comparative Statics with Some Economic Models
Fourteenth week	1. (6/3) Ordinary Differential Equations: Theory 2. (6/4) Ordinary Differential Equations: Application * Quiz 6
Fifteenth week	Dead Week
Sixteenth week	1. (6/17) Final Examination 2. (6/18) No session

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third	assignment		submission date	
	purpose			

assignment	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Practical Academic Korean	Course Number	0012015001
Major / School Year	/ 2	completion division / Grade evaluation	/
Department/Professor	/	Grades/Lecture/ Practice	2 / 1 / 2
Phone Number		A weekday / class / lecture room	[14-117:수(7)(8)] [14-224:금(8)]
Office hours			

[1] Outline / Purpose

이 수업은 IBE전공 과목으로서 수강하는 모든 학생들이 외국인 학생들이므로 한국에서의 대학 생활이 처음이거나 익숙하지 않다. 그러므로 한국 대학 생활에 적응하기 위한 기본적인 언어, 기술, 문화적 소양을 습득할 수 있도록 교수하고자 한다.

[2] Course Learning Outcomes

이 수업을 통해 학생들은 한국어로 된 시스템 내에서 수강 신청, 도서관 이용 등을 할 수 있다. 또한 한국에서 통용되는 방법, 또는 한국어로 이메일 작성, 보고서 작성, 파워포인트 제작을 할 수 있다.

[3] Class Delivery Method

수업을 수강하는 학생들의 수준에 따라 한국어와 영어를 병행하여 진행함.
중간고사까지는 이론 위주, 중간고사 이후로는 견학, 보고서 작성, 발표 등의 실습 위주로 진행함.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	0 %	0 %	30 %	0 %	0 %	10 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
30 %	0 %	40 %	0 %	20 %	10 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
20 %	20 %	60 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	서강대학교 한국어교육원	Publisher	서강대학교 한국어교육원	Textbook	서강한국어 쓰기1(학문 목적 과정)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	오리엔테이션, 수업 소개
Second week	1과. 입학
Third week	2과. 수강 신청
Fourth week	3과. 강의
Fifth week	쓰기체
Sixth week	4과. 도서관
Seventh week	5과. 도서 대출
Eighth week	중간고사
Ninth week	도서관 견학 및 도서 대출/과제 1
Tenth week	이메일 작성법/과제 2
Eleventh week	기말 팀 프로젝트/서울 명소 견학
Twelfth week	보고서 작성법/보고서 작성하기
Thirteenth week	발표문 작성법/발표문 쓰기
Fourteenth week	파워포인트 작성법/파워포인트 만들기
Fifteenth week	기말 발표
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Statistics for Business Economics	Course Number	0011544001
Major / School Year	/ 2	completion division / Grade evaluation	/
Department/Professor	/ 권재현	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[14-219:수(4-5A),목(4-5A)]
Office hours	https://sites.google.com/inu.ac.kr/prof-jae-h-gwon/office-hours	lecture room	

[1] Outline / Purpose

This course aims to provide students with a solid foundation in statistical methods and probability theory, tailored specifically for applications in business economics. Through this course, students will learn to apply statistical reasoning effectively to analyze and solve problems commonly encountered in the fields of business and economics. Additionally, the course introduces students to essential techniques in data analysis, including estimation and hypothesis testing, ensuring they are equipped with practical tools for decision-making in real-world scenarios.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

1. develop a strong mathematical foundation for economic and business applications;
2. apply algebraic and calculus-based methods to solve economic problems;
3. analyze and optimize economic and business decision-making processes.

[3] Class Delivery Method

This course has no prerequisites; students may enroll without prior approval from the instructor. The course consists of two 1.5-hour sessions each week. The primary mode of instruction is lectures delivered by the instructor.

This course will be managed entirely on Google Classroom, not on the University's course webpage (cyber.inu.ac.kr). After enrollment, students must register for the Google Classroom to access course materials, announcements, and assignments. Registration details will be provided after enrollment.

There will be two major exams during the semester:

1. Midterm Exam (scheduled in the 8th week): Exam date may be subject to change.
2. Final Exam (6/18 in week 16): Please plan your vacation schedule accordingly, as the final exam date is fixed and non-negotiable.

Additionally, there will be a few pop-up quizzes administered at the very beginning of some selected sessions. These quizzes are designed to assess understanding of recent material and typically last no longer than 15 minutes. More information is in <https://sites.google.com/inu.ac.kr/prof-jae-h-gwon/teaching>.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Attendance 20% // Quizzes 20% / Assignments 10% // Midterm 20% / Final 30%

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Mark Schervish and Morris DeGroot	Publisher	Pearson	Textbook	Probability and Statistics (4th edition, international)	Issued year	2013
		Robert V. Hogg, Allen T.				Introduction to Mathematical		

(2)	Author	Craig, and Joseph Mckean	Publisher	Pearson	Textbook	Statistics (8th edition, global)	Issued year	2020
(3)	Author	Alexander M. Mood, Franklin A. Graybill, and Duane C. Boes	Publisher	McGraw-Hill	Textbook	Introduction to the Theory of Statistics (3rd edition)	Issued year	1974
(4)	Author	Jame T. McClave, P. George Benson, and Terry Sincich	Publisher	Pearson	Textbook	Statistics for Business and Economics (13th edition, global)	Issued year	2018
(5)	Author	David Freedman, Robert Pisani, and Roger Purves	Publisher	W. W. Norton & Co.	Textbook	Statistics (4th edition, International)	Issued year	2007

[Other books]

[6] Weekly lesson plans

First week	1. (3/5) Course Description 2. (3/6) Axiomatic Approach to Probability (1)
Second week	1. (3/12) Axiomatic Approach to Probability (2) 2. (3/13) Conditional Probability
Third week	1. (3/19) Limits 2. (3/20) Random Variable and Its Distribution * Quiz 1
Fourth week	1. (3/26) Radom Vector and Joint Distribution 2.. (3/27) Probability Density
Fifth week	1. (4/2) Conditional Distribution and Independence of Random Variables 2. (4/3) Expectation of Radom Variable(s) * Quiz 2
Sixth week	1. (4/9) Mean, Variance, Covariance, and Correlation 2. (4/10) Important Inequalities
Seventh week	1. (4/16) Conditional Expectation 2. (4/17) Moments, Moment Generating Functions, and Qunatiles * Quiz 3
Eighth week	1. (4/23) No Session (Exam Preparation) 2. (4/24) Midterm Examination
Ninth week	1. (4/30) Family of Distributions (1) 2. (5/1) Family of Distributions (2)
Tenth week	1. (5/7) Functions of Random Variables and Its Distribution 2. (5/8) Sampling Distribution * Quiz 4
Eleventh week	1. (5/14) Limit Theorems: Law of Large Numbers (LLM) and Central Limit Theorem (CLT) 2. (5/15) Application of LLM and CLT
Twelfth week	1. (5/21) Concepts of Statistical Inference 2. (5/22) Sample Analogue Estimation and Maximum Likelihood Estimation * Quiz 5
Thirteenth week	1. (5/28) Unbiasedness, Consistency, and Mean-Squared Errors 2. (5/29) Concepts of Statistical Test
Fourteenth week	1. (6/4) Likelihood Ratio Test and Others 2. (6/5) Applications * Quiz 6
Fifteenth week	Dead Week
Sixteenth week	1. (6/18) Final Examination 2. (6/19) No Session

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second	assignment		submission date	
	purpose			

assignment	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Corporate Finance	Course Number	0011546001
Major / School Year	/ 3	completion division /Grade evaluation	/
Department/Professor	/ 김윤경	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-220:목(2B-3)] [14-224:화(4-5A)]
Office hours			

[1] Outline / Purpose

This course presents the fundamental concepts of financial accounting and finance, from the perspective of both managers and investors. The course emphasizes understanding, analyzing, and integrating financial information as an aid to making financial decisions. *Prerequisite: In order to enroll in this course, students must have either taken Principles of Financial Accounting (0011555) or possess equivalent knowledge in Financial Accounting.*

[2] Course Learning Outcomes

Students are expected to gain a solid understanding of key financial concepts related to corporate finance. In addition, this course is to provide students with fundamental principles and tools used in corporate finance.

[3] Class Delivery Method

Lectures and Discussions

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Midterm Exam: 30%

Final Exam: 30%

Discussion Assignments: 20%

Attendance: 20%

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Ross, Westerfield and Jordan	Publisher	McGraw-Hill	Textbook	Essentials of Corporate Finance (11e)	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Ch 1. Introduction to Financial Management
Third week	Ch 2. Financial Statements, Taxes, and Cash Flow
Fourth week	Ch 3. Working with Financial Statements
Fifth week	Ch 4. Introduction to Valuation: The Time Value of Money
Sixth week	Ch 5. Discounted Cash Flow Valuation
Seventh week	Ch 5. Discounted Cash Flow Valuation (cont'd)
Eighth week	Midterm Exam
Ninth week	Ch 6. Interest Rates and Bond Valuation
Tenth week	Ch 7. Equity Markets and Stock Valuation
Eleventh week	Ch 8. Net Present Value and Other Investment Criteria
Twelfth week	Ch 9. Making Capital Investment Decisions
Thirteenth week	Ch 11. Risk and Return
Fourteenth week	Ch 12. Cost of Capital
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Business Communication	Course Number	0011547001
Major / School Year	/ 3	completion division /Grade evaluation	/
Department/Professor	/ 차형석	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-219:월(4)(5)(6)]
Office hours			

[1] Outline / Purpose

Business Communication focuses on developing effective communication skills crucial for success in the corporate world.

[2] Course Learning Outcomes

It covers topics such as professional writing, oral presentations, interpersonal communication, and digital communication strategies. This course equips students with the ability to convey ideas, make persuasive arguments, and engage in professional interactions.

[3] Class Delivery Method

Lecture – Discussion – Practice

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
%	%	%	%	%	%	%	%

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
%	%	%	%	%	%	%	%

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 1: Introduction to Business Communication Module 1: Understanding Business Communication Module 2: Adapting Your Message to Your Audience
Second week	Week 2: Communicating through Writing Module 3: Communicating Interpersonally Module 4: Communicating through Technology
Third week	Week 3: Crafting Messages for Digital Channels Module 5: Crafting Messages for Electronic Media Module 6: Writing Routine and Positive Messages
Fourth week	Week 4: Writing Negative Messages and Persuasive Messages Module 7: Writing Negative Messages Module 8: Writing Persuasive Messages
Fifth week	Week 5: Understanding and Planning Reports and Proposals Module 9: Planning Reports and Proposals Module 10: Writing Reports and Proposals
Sixth week	Week 6: Designing and Delivering Oral and Online Presentations Module 11: Completing Reports and Proposals Module 12: Giving Oral Presentations
Seventh week	Week 7: Building Careers and Writing Resumes Module 13: Building Careers and Writing Résumés Module 14: Applying and Interviewing for Employment
Eighth week	Week 8: Midterm Review and Exams
Ninth week	Week 9: Communicating in Teams and Mastering Listening and Nonverbal Communication Skills Module 15: Communicating in Teams Module 16: Mastering Listening and Nonverbal Communication Skills
Tenth week	Week 10: Managing Interpersonal Relations and Conflicts Module 17: Managing Interpersonal Relations Module 18: Managing Conflict
Eleventh week	Week 11: Planning, Writing, and Completing Reports and Proposals Module 19: Planning Reports and Proposals Module 20: Writing Reports and Proposals
Twelfth week	Week 12: Completing Reports and Proposals Module 21: Completing Reports and Proposals
Thirteenth week	Week 13: Developing Oral and Online Presentations Module 22: Developing Oral and Online Presentations Module 23: Enhancing Presentations with Slides and Other Visuals
Fourteenth week	Week 14: Job Hunting Module 24: Building a Career with Your Communication Skills Module 25: Writing Résumés and Job Application Letters
Fifteenth week	Week 15: Review and Final Exams Module 26: Interviewing for a Job and Preparing Employment Messages
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			

	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Economic Development	Course Number	0011545001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	/ 정승호	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[14-220:화(7-8A),수(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

This course explores why some countries achieve sustained economic growth while others remain stagnant. It examines how capital accumulation, education, and demographic factors contribute to income differences, how technological progress and institutional efficiency drive productivity, and how political, cultural, and geographical factors shape long-term development. A key focus is South Korea, a striking example of rapid economic transformation, where investment in human capital, industrialization, and export-driven policies enabled a transition from poverty to prosperity within a generation. By integrating theory with real-world cases, including Korea's growth and contemporary challenges like geopolitical risks and global trade tensions, this course provides a comprehensive understanding of economic development.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

Understand the key theories of economic growth and development.

1. Analyze the role of capital, labor, and technology in long-term growth.
2. Evaluate empirical data on global economic trends.
3. Apply theoretical frameworks to Korea's economic development experience.
4. Discuss contemporary economic challenges affecting Korea and other emerging economies.

[3] Class Delivery Method

Lecture: 70%

Discussion: 30%

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	30 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

-Midterm Exam: 30% (Week 7)

-Final Exam: 40% (Week 15)

-Attendance: 20%

-Assignments & Class Participation: 10%

Active participation is a key component of this course. Participation points are earned through short pre-class quizzes on the course website and regular attendance. Extra credit may be awarded for outstanding participation, including insightful questions and contributions during discussions. Engaging actively in class through thoughtful questions and well-reasoned answers can enhance your score.

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	David N. Weil	Publisher	Routledge (2012)	Textbook	Economic Growth (3rd Edition)	Issued year	2012
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to Economic Development (Chapter 1) Special Focus: Key facts on global economic disparities
Second week	Framework for Economic Growth (Chapter 2) Special Focus: Overview of key models and methodologies
Third week	Capital Accumulation & Economic Growth (Chapter 3) Special Focus: Role of investment and Korea's savings culture
Fourth week	Population and Economic Growth (Chapters 4–5) Special Focus: Korea's demographic challenges
Fifth week	Human Capital and Productivity (Chapters 6–7) Special Focus: Education, labor force, and gender dynamics in Korea
Sixth week	Technology and Economic Growth (Chapters 8–9) Special Focus: Korea's technological advancements and R&D strategies
Seventh week	Midterm Exam Covers Weeks 1–6, focusing on key economic growth concepts
Eighth week	Efficiency and Institutions (Chapter 10) Special Focus: Case study on chaebols and institutional efficiency
Ninth week	Growth in the Open Economy (Chapter 11) Special Focus: historical evolution of Korean trade policy from 1950 to the present
Tenth week	The Role of Government in Economic Growth (Chapter 12) Special Focus: Policy reforms and Korea's economic trajectory
Eleventh week	Income Inequality and Growth (Chapter 13) Special Focus: Korea's rising inequality and labor market shifts
Twelfth week	Cultural and Geographical Factors in Growth (Chapters 14–15) Special Focus: How culture and geography shape Korea's development
Thirteenth week	Environment and Sustainable Growth (Chapter 16) Special Focus: Green growth and Korea's response to climate change
Fourteenth week	Contemporary Challenges in Korea's Economy Special Focus: US–China conflict, North Korea's economic risks
Fifteenth week	Final Exam Covers Weeks 8–14, focusing on applied economic development concepts
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Econometrics 1	Course Number	0011543001
Major / School Year	/ 3	completion division / Grade evaluation	/
Department/Professor	/ 권재현	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[14-220:화(8B-9),목(8B-9)]
Office hours	https://sites.google.com/inu.ac.kr/prof-jae-h-gwon/office-hours	lecture room	

[1] Outline / Purpose

This course provides an introduction to econometric methods and their applications in economic analysis. Students will learn how to estimate and interpret linear regression models, conduct hypothesis tests, and handle econometric issues such as multicollinearity, heteroskedasticity, and autocorrelation. The focus will be on basic regression methods for cross-sectional data and time series. Topics such as panel data analysis, instrumental variables, limited dependent models, and natural experiments will be reserved for Econometrics 2.

[2] Course Learning Outcomes

By the end of this course, students will be able to:

1. understand the principles of econometric modeling;
2. estimate and interpret single and multiple regression models;
3. conduct hypothesis testing in econometric contexts;
4. diagnose and address common econometric issues;
5. apply econometric methods to analyze economic data using statistical software.

[3] Class Delivery Method

This course requires two prerequisites: Financial Mathematics and Statistics for Business Economics. Students who have taken equivalent courses may enroll but must consult the instructor beforehand to gain permission. The course consists of two 1.5-hour sessions each week. The primary mode of instruction is lectures delivered by the instructor, supplemented by occasional student participation. Students may be asked to provide brief presentations related to their homework assignments to foster engagement and reinforce learning.

This course will be managed entirely on Google Classroom, not on the University's course webpage (cyber.inu.ac.kr). After enrollment, students must register for the Google Classroom using a registration code provided by the instructor. Registration will only be granted once students prove they have taken the required prerequisites or equivalent courses.

There will be two major exams during the semester:

1. Midterm Exam (scheduled in the 8th week): Exam date may be subject to change.
2. Final Exam (6/17 in week 16): Please plan your vacation schedule accordingly, as the final exam date is fixed and non-negotiable.

Additionally, there will be a few pop-up quizzes administered at the very beginning of some selected sessions. These quizzes are designed to assess understanding of recent material and typically last no longer than 15 minutes. More information is in <https://sites.google.com/inu.ac.kr/prof-jae-h-gwon/teaching>.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
50 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Attendance 20% // Quizzes 20% / Assignments 10% // Midterm 20% / Final 30%

① Percentage of grade evaluation

Exam	Attendance	Assignment
50 %	20 %	30 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Wooldridge	Publisher	Cengage	Textbook	Introductory Econometrics (7th edition)	Issued year	2019
(2)	Author	Fumio Hayashi	Publisher	Princeton University Press	Textbook	Econometrics	Issued year	2000
(3)	Author	Ramu Ramanathan	Publisher	South-Western College Pub	Textbook	Introductory Econometrics with Applications (5th edition)	Issued year	2001
(4)	Author	J. Johnston	Publisher	McGraw-Hill	Textbook	Econometric Methods (3rd edition)	Issued year	1991
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Lecture notes will be distributed.

[6] Weekly lesson plans

First week	1. (3/4) Course Description 2. (3/6) Linear Algebra: Preliminaries (1)
Second week	1. (3/11) Linear Algebra: Preliminaries (2) 2. (3/13) Linear Algebra: Preliminaries (3)
Third week	1. (3/18) Linear Algebra: Preliminaries (4) 2. (3/20) Linear Algebra: Preliminaries (5) * Quiz 1
Fourth week	1. (3/25) Linear Algebra: Preliminaries (6) 2. (3/27) Classical Regression: Model and Assumptions
Fifth week	1. (4/1) Classical Regression: Estimator and Its Geometry 2. (4/3) Classical Regression: Decomposition of Squarings and Reparametrization * Quiz 2
Sixth week	1. (4/8) Classical Regression: Two-Step Regression 2. (4/10) Classical Regression: Properties of the Least Squares Estimator
Seventh week	1. (4/15) Classical Regression: Statistical Tests 2. (4/17) Classical Regression: Asymptotics * Quiz 3
Eighth week	1. (4/22) No Session (Exam Preparation) 2. (4/24) Midterm Examination
Ninth week	1. (4/29) Multiple Regression Analysis: Estimation and Inference 2. (5/1) Multiple Regression Analysis: Further Issues
Tenth week	1. (5/6) Multiple Regression Analysis: Qualitative Information 2. (5/8) Heteroskedasticity and General Linear Regression (GLS) * Quiz 4
Eleventh week	1. (5/13) Basic Regression Analysis with Time Series Data 2. (5/15) Further Issues in Using OLS with Time Series Data
Twelfth week	1. (5/20) Serial Correlation and Heteroskedasticity in Time Series Regressions (1) 2. (5/22) Serial Correlation and Heteroskedasticity in Time Series Regressions (2) * Quiz 5
Thirteenth week	1. (5/27) Simultaneous Equations Models: Theory (1) 2. (5/29) Simultaneous Equations Models: Theory (2)
Fourteenth week	1. (6/3) Simultaneous Equations Models: Application (1) 2. (6/5) Simultaneous Equations Models: Application (2) * Quiz 6
Fifteenth week	Dead Week
Sixteenth week	1. (6/17) Final Examination 2. (6/19) No Session

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The third assignment	purpose	
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Marketing Science	Course Number	0011549001
Major / School Year	/ 3	completion division /Grade evaluation	/
Department/Professor	/ 차형석	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[14-219:월(1)(2)(3)]
Office hours			

[1] Outline / Purpose

In general, it offers a thorough grounding in the fundamentals of marketing, equipping students with the essential knowledge and abilities needed to thrive in the ever-changing and competitive landscape of marketing and business.

[2] Course Learning Outcomes

The primary aim of the Marketing Principles course is to equip students with a comprehensive understanding of the fundamental concepts, theories, and practices that drive effective marketing in contemporary businesses. Upon completion of the course, students are expected to be proficient in the analysis and development of marketing strategies, grounded in both academic literature and real-world applications.

[3] Class Delivery Method

Reading materials in PDF, Text books

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
40 %	30 %	0 %	0 %	30 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	30 %	0 %	70 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction to Marketing & Orientation Definition and scope of marketing Evolution of marketing concepts Marketing's role in business and society
Second week	Marketing Environment Understanding the marketing environment Micro and macro-environment factors Impact of environmental forces on marketing decisions
Third week	Consumer Behavior The psychology of consumer behavior Factors influencing consumer buying decisions Market segmentation and targeting
Fourth week	Market Research and Analysis Conducting market research Analyzing market data and trends Identifying marketing opportunities
Fifth week	Product Strategy Product development and lifecycle Branding and positioning Product mix and product line decisions
Sixth week	Distribution and Channel Management Understanding distribution channels Channel design and management Retailing and e-commerce
Seventh week	Integrated Marketing Communication Promotional mix elements (Advertising, Sales Promotion, Public Relations, Personal Selling) Developing effective marketing communication campaigns Measuring communication effectiveness
Eighth week	Mid-term Exam
Ninth week	Services Marketing Characteristics of services marketing Service quality and customer satisfaction Service marketing strategies
Tenth week	No Class for Holiday: Enjoy it with your beloved ones
Eleventh week	Digital Marketing The role of digital platforms in marketing Social media marketing Search engine optimization and digital advertising
Twelfth week	Marketing Ethics and Social Responsibility Ethical issues in marketing Socially responsible marketing practices Sustainability and marketing
Thirteenth week	Global Marketing Opportunities and challenges in international markets Adapting marketing strategies for global audiences Cross-cultural marketing considerations
Fourteenth week	Marketing in the Digital Age Emerging trends and technologies in marketing Data-driven marketing strategies Marketing automation and AI
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Topics in Asian Economies	Course Number	0011564001
Major / School Year	/ 4	completion division / Grade evaluation	/
Department/Professor	/ 임의진	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[14-219:월(7)(8)(9)]
Office hours		lecture room	

[1] Outline / Purpose

This course offers an in-depth exploration of East Asian economies and international development. Designed for undergraduate students, the first part of the course examines the economic characteristics, historical context, and key trends shaping East Asia, including both North and South East. The second part shifts to the principles, practices, and policies of international development cooperation, which is an increasingly vital topic of the global community, especially focusing on the regional context.

By the end of the module, students will have developed a comprehensive perspective on East Asian economies and the dynamics of development cooperation, while bridging theory and practice. This course also encourages students to familiarise with international organisations and to discover potential career pathways in the field of international development.

[2] Course Learning Outcomes

- Critically analyse the key concepts, theoretical frameworks, and prevailing discourses surrounding East Asian economies and international development cooperation.
- Investigate how development projects operate in practice, linking theoretical understanding to real-world applications.
- Understand the roles of international organisations and regional actors in development cooperation.

[3] Class Delivery Method

Lecture, Discussion, and Field Visit

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	10 %	0 %	0 %	0 %	0 %	10 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	80 %	0 %	10 %	0 %	0 %	10 %

[4] Grading Policies

- Midterm Exam: 20%
- Final Exam: 40%
- Attendance: 20%
- Assignment: 20%

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Reading materials will be provided before class, if necessary.	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Week 1 (3.10): Course Introduction • Lecture Orientation: Overview of weekly lectures, assignments, and expectations. • Introduction to the Historical Context and Current Circumstances of East Asia – Relationships among East Asian countries and regional characteristics within the global system. – Political and economic dynamics surrounding the Korean Peninsula.
Second week	Week 2 (3.17): Understanding the "East Asian Miracle" • Developmental State Model: – Similarities and differences in growth models of South Korea, Japan, and Taiwan. – Applicability of the East Asian model to other regions. • Post-WWII Context: – Influence of the United States on East Asia. – Western perspectives on East Asia's development.
Third week	Week 3 (3.24): U.S. – East Asia Relations in the 2nd Trump Era • Geopolitical and Economic Tensions: – U.S. strategies to counter China (e.g., AUKUS, Quad, Five Eyes, bilateral alliances). – Economic conflicts: CPTPP, IPEF, RCEP. – U.S. industrial policies (e.g., IRA) and potential influences. • Impact on International Organisations: – U.S. – China tensions in global bodies such as the UN. – U.S. withdrawal from the Paris Agreement and WHO.
Fourth week	Week 4 (3.31): China and ASEAN Growth Models • Economic Trajectories: Are China and ASEAN countries following the paths of South Korea, Japan, and Taiwan?
Fifth week	Week 5 (4.7): Korea's Economic Cooperation with Southeast and Central Asia • Regional Economic Partnerships: Key areas of collaboration between Korea, Southeast Asia, and Central Asia.
Sixth week	Week 6 (4.14): International Development Cooperation • Foreign Aid and ODA (Official Development Assistance) • Brief history of international development from colonial imperialism • Rising of emerging donors.
Seventh week	Week 7 (4.21): Midterm Exam
Eighth week	Week 8 (4.28): Development Cooperation in Regional Context • International development in the context of East Asia's political, economic, and social dynamics. • Labour exportation, migration and remittances.
Ninth week	Week 9 (5.5): No Class (Children's Day) The lecture will be replaced by online session (To be taken online between 5–7 May from any location) • Lecture Video (1–1.5 hours): – Introduction of major international organisations (e.g., UN, international financial institutions, governmental agencies). – Career pathways in related fields. • Assignment (Not reflected in the course overall grade, but attendance credited upon submission) – Identify 3 organisations you are interested in and write 2–3 sentences of why you are interested in these organisations. – Submission deadline: 9 May (Fri), 23:59.
Tenth week	Week 10 (5.12): Development Goals and Perspectives by Country • Development cooperation goals and priorities of Korea, China, Japan, and Southeast Asian countries. • Overview of Korea's development cooperation project cycle.
Eleventh week	Week 11 (5.19): Assignment Presentations • Student Presentations: Feedback and discussions.
Twelfth week	Week 12 (5.26): Environment and Climate Change, and Renewable Energy • Major agendas of climate change and renewable energy (e.g. solar and offshore wind). • U.S. withdrawal from climate agreements and its impact. • Conflicts between developed and developing countries regarding CO2 emissions.
Thirteenth week	Week 13 (6.2): Field Visit (To be confirmed) • Green Climate Fund (GCF): Tour and discussions on global climate finance initiatives.
	Week 14 (6.9): Development Practices

Fourteenth week	• Examples of project formation, development, and implementation • Environmental and social safeguard system • How to write PCP (Project Concept Paper)
Fifteenth week	Week 15 (6.16): Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Job Description Analysis	submission date	2025-05-18 Sun
	purpose	Encourage students to familiarise with international organisations and discover potential career pathways		
	procedure & notice	Specific guidelines for the assignment will be provided during class		
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to Film and Media Studies	Course Number	0009089001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	/ 조지민	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[12-404:수(5B-6)(7-8A)]
Office hours			

[1] Outline / Purpose

This course provides an introduction to a range of approaches to viewing and analyzing films from the languages, aesthetics, and cultures of cinema. You will build vocabulary of film form and learn to construct an argument about what a film's sounds and images mean and how it structures and achieves its meaning, with a brief overview of the study of film genre, film history, and film theory.

Special attention will be paid to writing about film, and this course will develop the critical thinking and writing skills needed for academic film analysis. By the end of the course, students will be able to define and employ terms and concepts fundamental to film studies, and ultimately write analytical essays that show an understanding of film form and culture.

[2] Course Learning Outcomes

1. To learn the fundamentals required for film study.
2. To understand the basic terms and techniques needed for discussing film.
3. To apply these terms and techniques descriptively and functionally in film analysis.
4. To read and interpret films in their cultural contexts.
5. To articulate your understanding of film and filmmaking knowledgeably and effectively, through both written and oral presentations, and thereby to create well-organized, thoughtful critical analyses of films viewed.
6. To form an intellectually challenging, supportive, and fun classroom community of viewers, readers, writers, and learners.

[3] Class Delivery Method

Lecture, Discussion, Viewing films, Analysis and Presentations
ENGLISH LECTURE (NO KOREAN)

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	0 %	10 %	10 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	80 %	0 %	10 %	0 %	10 %	0 %

[4] Grading Policies

Please refer to paper syllabus provided on first day of lecture

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Barsam, R. M., & Monahan, D.	Publisher	Norton & Company	Textbook	Looking at Movies: An introduction to film.	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Hornaday, Ann	Publisher		Textbook	Talking Pictures: How to Watch Movies	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	

(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Topics: Exploring the work and assumptions of cinematic language; becoming a critical viewer; seeing film through the lens of a filmmaker
Second week	Topics: Principles of film form: Analyzing film in relation to form and content: verisimilitude; manipulation of time and space
Third week	Topics: Genres and elements of narrative; script format
Fourth week	Topics: Elements of a story
Fifth week	Topics: Thinking about images: Exploring visual design; mise-en-scene; elements of design; composition & kinesic
Sixth week	Topics: Thinking about moving images: Exploring cinematography; the relationship of people and things to one another in film; implied proximity; depth; camera angles and movement; speed and length of shot
Seventh week	Topics: Documentary: Exploring film history; aesthetics, technology, economics and social history
Eighth week	Topic: Group Presentation
Ninth week	Topics: Acting and aspects of performance; styles and influences Week Ten: 9 Nov
Tenth week	Topics: Editing
Eleventh week	Topics: Sounding out the image: exploring sound and dialogue; juxtaposition and meaning, duration, pace and rhythm, transitions; the relationship of sound to image, diegetic vs. non-diegetic, recording techniques, sound design
Twelfth week	Topics: effects of Social Media
Thirteenth week	Topics: The Relationship of the viewer to the film; audience demographics; film as moral, philosophical, or social statements; film as emotional or sensual experience and Asian representation in film and media,
Fourteenth week	Review paper Presentation
Fifteenth week	Review paper Presentation
Sixteenth week	

[7] Assignments

The first assignment	assignment	Tell a story in 6 photos and story board	submission date	2025-05-01 Thu
	purpose	Structure and composition of story and visualize the organize the composition		
	procedure & notice	Select an existing story and re-tell the story from a specific perspective. You can use the existing plot or change it according to you preference. Remember what do we consider "a story" and its essential elements (beginning, middle, end, a subject, a process, some kind of conflict/drama/idea, etc.) Consider how you can use elements of composition such as: shot size, focus, depth of field (loosely meaning: foreground/mid-ground/background), color and light, to create frames that visually represent a specific point of view you are using to tell a story.		
	references			
The second assignment	assignment	Film analysis (group work)	submission date	2025-06-01 Sun
	purpose	fundamental concepts of narrative story structure within a screenplay		
	procedure & notice			
	references			
	assignment	Critical review Paper	submission date	

The third assignment	purpose	
	procedure & notice	See the rest of assignment given on the first day of class
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introductory College Writing	Course Number	0009081001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	Institute of General Education / 피터 래버	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	
Office hours	By Request	lecture room	

[1] Outline / Purpose

The principal goal of this course is, most obviously, to help you to improve and fine-tune your writing skills. Its more subtle goal is to enable you to see the extent to which your perception of the "world" is determined by language, and to help you to use language in ways essential to discovery, to learning, and to knowing. Thus, Introductory College Writing is, first and foremost, a survival course in that it teaches you the writing skills that will improve your chances of success in any field of study or occupation. More immediately, this class is designed to prepare you to handle the writing assignments you will be given during your career at INU. Only in successfully completing the writing assignments in your courses (and, quite naturally, also in this course) will you be able to "survive" at INU and graduate with strong qualifications for the job world. Welcome and enjoy!

[2] Course Learning Outcomes

As the title of this course suggests, Introductory College Writing will focus on composition—on the art of arranging and developing your ideas in writing. This means that the course attempts to teach you to write, mainly by examining, analyzing and practicing various modes of writing. (It is not a course in spelling, grammar, and mechanics, even though we may take time out to talk about these). On a most fundamental level, its goal is to raise your awareness with regard to both your writing and reading. Through the careful study of thought-provoking texts you will develop better reading skills and understand the effects of these texts on you more clearly. At the same time, frequent assignments in and out of class will sharpen your writing skills and make you more aware of your own way/style of writing. Only by understanding more clearly the nature of your own writing will you be able to make use of the suggestions of improvement that are at the center of this course.

[3] Class Delivery Method

This course focuses on writing for Academia and as such we will start with basic sentence structure and move into writing paragraphs by the end of the semester. We will write and read every week during class to prepare you for the academic world.

③ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

④ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

Grading and attendance -

Attendance as a policy at our school is 20%. Each class we will have practical practice and feedback. Each week there is optional writing that can be used if the student wishes to have extra feedback. This can count for attendance, under special circumstances. This policy will be explained in detail on the first day of class.

Exams

There will be a midterm and a final exam. The midterm exam will be on the general and specific structures of the sentence; theoretical and practical knowledge will be tested. The final exam will be practical and will ask you to write and organize paragraphs about a range of topics. You will need to prepare for and study using the book.

⑤ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Dorothy Zemach / Carlos Islam	Publisher	Macmillan Education	Textbook	Writing: Paragraphs: From Topic to Paragraph	Issued year	2020
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction
Second week	Beginning to Work
Third week	Topic Sentences
Fourth week	Adjectives
Fifth week	Capitalization / Adjectives (continued)
Sixth week	How to begin: Finding a place to start. What to write about.
Seventh week	Opinion Sentences – Getting your point across.
Eighth week	Midterm
Ninth week	Explaining Cause and Effect
Tenth week	Logical Order of supporting sentences
Eleventh week	Time expressions in paragraphs
Twelfth week	Comparison Paragraphs
Thirteenth week	Explaining your decisions
Fourteenth week	Writing about the Future
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission	

The third assignment			date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Language and Culture	Course Number	0009083001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	/ 조지민	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[12-404:목(5B-6)(7-8A)]
Office hours		lecture room	

[1] Outline / Purpose

This aim of this course is to acquire a basic knowledge of scientific paradigms and research methods through reviews of a wide variety of culture and language, and interconnectedness between language and culture. Through research, examines the way language reflects beliefs and values of a society, and analyses the influences culture and language on behavior.

[2] Course Learning Outcomes

1. describe, discuss and apply central/basic concepts and methods for collection, process, presentation and interpretation of data. ;
2. understand the practical as well as theoretical relevance in formulating a research problem and its relationship to design of methods;
3. relate ethically and responsibly to the collection and processing of data;
4. assess and value the quality of research results;
5. evaluate information and data from different type of sources;
6. write an academic report based on an autonomously conducted empirical study
7. Understand how the use of language has a symbolic relationship with culture
8. Identify the ways in which the students uses language in daily life
9. Understand how language enables, structures and contained our interactions
10. Understand how language and culture have affected one another

[3] Class Delivery Method

Lectures, discussions, presentation

ALL English

No Korean in class

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kramsch and Widdowson	Publisher	Oxford University Press	Textbook	Language and Culture.	Issued year	2001
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Nunan and Choi	Publisher	Routledge	Textbook	Language and Culture:reflective narratives and the emergence of identity	Issued year	2010
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction and welcome to class V: Understanding anthropology Z: Describe syllabus and research
Second week	The concept of culture V: What is culture Z: Topic ideas
Third week	Research methods in cultural studies V: Research methods–literature review Z: Topic and research question
Fourth week	Language V: What is language Z: Literature review
Fifth week	Language and Cultural Identity V: Cultural identity Z: Identify gaps in literature
Sixth week	Research methods Part 2 V: Research methods Z: Choice of methods and sampling Literature review chapter due
Seventh week	Language and communication V: Dialects, Code switching, Nonverbal communication Z: Research methods– APA reference, making research questions
Eighth week	Language in action V: Literacy, Using language, Approach to understanding language in action, Writing and literacy Z: Research methods– distribution and collecting
Ninth week	Marriage and family V: Function, Mate selection, Roles, etc. Z: Research methods– analyzing data, graphs, SPSS, NVivo etc.
Tenth week	Kinship and descent V: Defined, Cultural rules, Using kinship diagram, Principles of kinship classification Z: Academic writing– Discussion
Eleventh week	Social stratification V: Dimensions of social inequality, Types of societies, Racial and ethnic stratification, Race and intelligence, Theories of stratification, Z: Academic writing– Limitation and conclusion
Twelfth week	Sex and gender V: Human sexuality, Gender roles, Gender and language, Gender stratification, Exploitation caused by gender Z: Academic writing– Connecting paragraph and words
Thirteenth week	Culture change and globalization V: Inventions/innovations, Diffusion, Acculturation and Linked changes Z: Free discussion Final paper due
Fourteenth week	Presentation
Fifteenth week	Presentation
Sixteenth week	Presentation

[7] Assignments

The first assignment	assignment	Group Discussions	submission date	
	purpose	communication		
	procedure & notice	Students will collect research articles and bring to class to critically discuss in groups		
	references			
	assignment	Topic of choice	submission date	2025–03–24 Mon

The second assignment	purpose	literature review		
	procedure & notice	Students will conduct literature review and write up the literature reivew section, the first part of the final paper.		
	references			
The third assignment	assignment	Research on topic of choice and final research paper	submission date	2025-06-07 Sat
	purpose	research		
	procedure & notice	students will conduct a research project on the topic of "how effective is English as a medium of instruction"		
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Language and Culture	Course Number	0009083002
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	/ 조지민	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[12-404:수(1-2A)(2B-3)]
Office hours		lecture room	

[1] Outline / Purpose

This aim of this course is to acquire a basic knowledge of scientific paradigms and research methods through reviews of a wide variety of culture and language, and interconnectedness between language and culture. Through research, examines the way language reflects beliefs and values of a society, and analyses the influences culture and language on behavior.

[2] Course Learning Outcomes

1. describe, discuss and apply central/basic concepts and methods for collection, process, presentation and interpretation of data. ;
2. understand the practical as well as theoretical relevance in formulating a research problem and its relationship to design of methods;
3. relate ethically and responsibly to the collection and processing of data;
4. assess and value the quality of research results;
5. evaluate information and data from different type of sources;
6. write an academic report based on an autonomously conducted empirical study
7. Understand how the use of language has a symbolic relationship with culture
8. Identify the ways in which the students uses language in daily life
9. Understand how language enables, structures and contained our interactions
10. Understand how language and culture have affected one another

[3] Class Delivery Method

Lectures, discussions, presentation

ALL English used

NO Korean spoken or written in this class

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
0 %	20 %	80 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kramsch and Widdowson	Publisher	Oxford University Press	Textbook	Language and Culture.	Issued year	2001
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author	Nunan and Choi	Publisher	Routledge	Textbook	Language and Culture:reflective narratives and the emergence of identity	Issued year	2010
(2)	Author		Publisher		Textbook		Issued year	

(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction and welcome to class V: Understanding anthropology Z: Describe syllabus and research
Second week	The concept of culture V: What is culture Z: Topic ideas
Third week	Research methods in cultural studies V: Research methods–literature review Z: Topic and research question
Fourth week	Language V: What is language Z: Literature review
Fifth week	Language and Cultural Identity V: Cultural identity Z: Identify gaps in literature
Sixth week	Research methods Part 2 V: Research methods Z: Choice of methods and sampling Literature review chapter due
Seventh week	Language and communication V: Dialects, Code switching, Nonverbal communication Z: Research methods– APA reference, making research questions
Eighth week	Language in action V: Literacy, Using language, Approach to understanding language in action, Writing and literacy Z: Research methods– distribution and collecting
Ninth week	Marriage and family V: Function, Mate selection, Roles, etc. Z: Research methods– analyzing data, graphs, SPSS, NVivo etc.
Tenth week	Kinship and descent V: Defined, Cultural rules, Using kinship diagram, Principles of kinship classification Z: Academic writing– Discussion
Eleventh week	Social stratification V: Dimensions of social inequality, Types of societies, Racial and ethnic stratification, Race and intelligence, Theories of stratification, Z: Academic writing– Limitation and conclusion
Twelfth week	Sex and gender V: Human sexuality, Gender roles, Gender and language, Gender stratification, Exploitation caused by gender Z: Academic writing– Connecting paragraph and words
Thirteenth week	Culture change and globalization V: Inventions/innovations, Diffusion, Acculturation and Linked changes Z: Free discussion Final paper due
Fourteenth week	Presentation
Fifteenth week	Make up if needed
Sixteenth week	Presentation

[7] Assignments

The first assignment	assignment	Group Discussions and presentation	submission date	
	purpose	communication		
	procedure & notice	Students will collect research articles and bring to class to critically discuss in groups Last lecture students will present their research in class		
	references			
			submission	

The second assignment	assignment	Topic of choice	date	2025-03-22 Sat
	purpose	literature review		
	procedure & notice	Students will conduct literature review and write up the literature reivew section, the first part of the final paper.		
	references			
The third assignment	assignment	Research on topic of choice and final research paper	submission date	2025-06-03 Tue
	purpose	research		
	procedure & notice	students will conduct a research project on the topic of "how effective is English as a medium of instruction"		
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Understanding Business	Course Number	0009076001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	Division of Business Administration / 김경미	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	
Office hours		lecture room	

[1] Outline / Purpose

This course examines the foundations of business. This is the cornerstone business course that includes topics in accounting, finance, information systems, management, marketing, and operations. The course demonstrates how the core business areas are interrelated with one another. This is an applied class in which students will engage in the process of making business decisions through a wide range of activities. In addition, this course will provide you with basic skills and knowledge to begin your career and help you succeed.

[2] Course Learning Outcomes

After completion of this course, students should be able to:

- Demonstrate an understanding of legal, financial, MIS, marketing, accounting, operations, and management issues involved with business decisions and innovations.
- Evaluate the commercial potential for new products or services and business improvements
- Evaluate the commercial potential for new products or services and business improvements.
- Evaluate the commercial potential for new products or services and business impro

[3] Class Delivery Method

This is an online course but take offline tests for midterm and final exam.

Determination of Course Grade:

Mid-term exam	25%	
Final exam		25%
Quizzes and homework	10%	
Individual project	20%	
Attendance	20%	
Total		100%

Letter grades will be based on the following schemes.

A+: 950 to 1,000, A: 900 to 949.9

B+: 850 to 899.9, B: 800 to 849.9

C+: 750 to 799.9, C: 700 to 749.9

D+: 650 to 699.9, D: 600 to 649.9

F: below 600

Each student will earn and credit points toward his/her final grade through every single activity.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
65 %	5 %	0 %	0 %	20 %	0 %	0 %	10 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	20 %	0 %	0 %	20 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Nickels, McHugh and McHugh	Publisher	McGraw Hill	Textbook	Understanding Business	Issued year	2012
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation, Introduction and class plan
Second week	Business trends 1
Third week	Business trends 2
Fourth week	Understanding economics 1
Fifth week	Understanding economics 2
Sixth week	Doing business in global markets 1
Seventh week	Doing business in global markets 2
Eighth week	Mid term on Oct 21 (Mon), 2024 at 6:00 P.M. Place: Building 14 room number will be notified later.
Ninth week	Demanding ethical and social responsibility 1
Tenth week	Demanding ethical and social responsibility 2
Eleventh week	How to form a business 1
Twelfth week	How to form a business 2
Thirteenth week	Entrepreneurship and starting a small business 1
Fourteenth week	Entrepreneurship and starting a small business 2
Fifteenth week	Final exam on June 9 (Mon), 2025 at 7:00 P.M. Place: Building 29 room number will be notified later. Individual project is on June 13, 2025 5:00 P.M.
Sixteenth week	make up class

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
	assignment		submission date	

The third assignment	purpose	
	procedure & notice	
	references	

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Public Issues and Controversies	Course Number	0004330001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[12-101:목(5B-6)(7-8A)]
Office hours	T , W, Th, F 10:30-12:00	lecture room	

[1] Outline / Purpose

The purpose of the class is to teach students to be better informed about public issues, how to evaluate and act on issues as a citizen, and how to understand issues in a policy framework.

[2] Course Learning Outcomes

Each student should be better informed about public issues, should understand the distinction between public and other issues, understand policy approaches to issues, and be better equipped to participate as a citizen.

[3] Class Delivery Method

The class proceeds with a presentation of general policy and issue-related concepts, followed by a series of popular issues and controversial topics presented through readings and addressed through student discussions, and reinforced through presentations where the students apply course concepts to issues of their concern. A large part of class time will be devoted to discussion.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
10 %	50 %	20 %	10 %	0 %	0 %	0 %	10 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
10 %	0 %	10 %	0 %	0 %	0 %	0 %	80 %

[4] Grading Policies

Grading: 10% Discussion 60% Exams: (20% Written Final)
20% Attendance 10% Participation (20% Written Midterm) (20% Oral Final)

Grading: 10% Discussion 60% Exams 20% Written Final
20% Attendance 10% Participation 20% Written Midterm 20% Oral Final

The reading should be done prior to class so that class time may focus on questions, review and practical exercises. Attendance is an important part of the course. If you are unable to attend the class, you should contact the professor as far in advance as possible. A good-faith effort should be made to participate in class. Student questions are encouraged, especially on work and general English topics.

③ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Introduction Problems and Issues
Second week	Discussion, Debate, and Creative Thinking Climate Change
Third week	Frames Energy
Fourth week	Fake News Education
Fifth week	Policy Models Employment
Sixth week	Governance and Government Action Gender Equality
Seventh week	Midterm Review Inequality
Eighth week	Written Midterm Due
Ninth week	Housing
Tenth week	Tech
Eleventh week	Security
Twelfth week	The Environment
Thirteenth week	Trade
Fourteenth week	Oral Exams
Fifteenth week	Written Final Due
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second	assignment		submission date	
	purpose			

assignment	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	US China Relations and Global Governance	Course Number	0011627001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	Dept. of Political Science & Int'l Relations /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[12-107:월(5B-6)(7-8A)]
Office hours			

[1] Outline / Purpose

US-China relations would be the most important determining factor of the coming global affairs. This course, first of all, aims to analyze the relations as it is and predict its future course of development with theory-guided approaches. This course then reviews key aspects of global governance resulting from evolving US-China relations, including the possibility of a new cold war, the future of globalization and liberal international order.

[2] Course Learning Outcomes

Understand actual and future development of US-China relations with theory-guided approaches
Understand key aspects of evolving global governance under the US-China strategic competition

[3] Class Delivery Method

For the first part of the course, students will read Lecture Note uploaded in advance and required readings on related theories and try to understand the actual development of US-China relations. For the second part of the course, students will present and lead discussion about the future shape of key aspects of the global governance as assigned. Students are required to understand both the actual and future course of development of US-China relations with theory-guided approaches, and key aspects of evolving global governance together (both theory and practice). Students will be evaluated primarily by mid-term exam and final presentation and discussion.

㉠ Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
80 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %

㉡ Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	80 %	0 %	0 %	0 %	20 %	0 %

[4] Grading Policies

㉠ Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학칙시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	LEE Hochul	Publisher		Textbook	Lecture Notes uploaded at e-Learning	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Lecture Note will be uploaded at e-Learning everyweek before the class.

[6] Weekly lesson plans

First week	Introduction: Why US–China Relations? Lecture Assignments
Second week	Is China Rising? Lecture Note References: World Politics Review, January 11, 2023. https://www.worldpoliticsreview.com/how-a-rising-china-has-remade-global-politics/
Third week	Aspects of US–China Relations Lecture Note on Three Levels of the Relationship
Fourth week	Is China Overtaking the US or Power Transition? Lecture Note on Analysis and Prediction
Fifth week	Thucydides Trap and Destined for War? Lecture Note on Thucydides Trap and Its Limits in Contemporary IR
Sixth week	Are the US and China Headed for War? Students Presentations and Discussion
Seventh week	Midterm Exam
Eighth week	the US and China in the Indo Pacific Lecture Note on Power Competition in the Indo Pacific, How & Why?
Ninth week	Leadership and Perception Lecture Note on the US Leadership Change and Perception on China and Chinese Leadership and its Perception on the US
Tenth week	Diplomacy between the US and China Lecture Note on Diplomatic History and Recent Developments
Eleventh week	Trade and US–China Relations Lecture Note on Trade Data Analysis
Twelfth week	Where to go: Partnership, Cooperation, Competition, Conflict, or Adversary? Lecture Note Students Presentations and Discussion
Thirteenth week	A New Cold War? Lecture Note Students Presentations and Discussion
Fourteenth week	Liberal International Order Would Survive? Lecture Note Students Presentations and Discussion
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment	Are the US and China Headed for War? (Week 6)	submission date	
	purpose			
	procedure & notice	Based on lectures, present your own answer and upload it at e–Learning Q&A.		
	references			
The second assignment	assignment	Where to go: Partnership, Cooperation, Competition, Conflict, or Adversary? (Week 12)	submission date	
	purpose			
	procedure & notice	Based on lectures, present your own answer and upload it at e–Learning Q&A.		
	references			
The third assignment	assignment	A New Cold War? (Week 13)/ LIO would survive? (Week 14)	submission date	
	purpose			
	procedure & notice	Choose a topic and present your own answer and upload it at e–Learning Q&A.		
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Global PR Campaigns A Case Study Approach	Course Number	0008630001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	Dept. of Media and Communication / 김지선	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[15-211:화(6)(7)(8)]
Office hours		lecture room	

[1] Outline / Purpose

The course is designed to introduce students to the global perspective of public relations with an emphasis on analyzing and evaluating real-world global PR campaigns. Topics and issues discussed include global vs. local PR strategy, social media campaigns, international/intercultural communication, corporate social responsibility (CSR), ESG (Environmental, social, and governance), and case studies.

[2] Course Learning Outcomes

- Understand the influences of key international factors and variables on the practice of public relations, from research and strategy through implementation and evaluation.
- Make good strategic and ethical decisions regarding issues of global PR.
- Gain experience working collaboratively in a group to evaluate global PR campaigns
- Develop a better global perspective, positively affecting their personal worldview and professional practice.

[3] Class Delivery Method

Various methods will be employed in this course: lecture, discussion, and presentation. Interactive classroom discussions will enhance learning, but are dependent on student participation.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
30 %	40 %	0 %	0 %	20 %	10 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	40 %	0 %	0 %	0 %

[4] Grading Policies

Grades are earned not given. You are responsible for your own success in the course.

Final course grade will be based on these percentages:

Attendance (20%)

Participation (10%)

Discussion Questions and Discussion Leader (10%)

Midterm Exam (20%)

Final Exam (20%)

Final Team Project (20%)

③ Percentage of grade evaluation

Exam	Attendance	Assignment
40 %	20 %	40 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

There is no required textbook in this course. Instead all required readings will be posted on the course website.

[6] Weekly lesson plans

First week	Intro to Course *The instructor reserves the right to change the topics, assignments, grading system, and schedule if necessary. All changes will be announced in class.
Second week	What is PR? PR vs. Advertising vs. Marketing: What's the difference?
Third week	Global PR and Diverse Publics
Fourth week	Values and Cultures, Dimensions of Culture
Fifth week	PR Process: RACE
Sixth week	Cultural Differences & Communication
Seventh week	Global PR Campaign Examples
Eighth week	Midterm Exam
Ninth week	Campaign Program Planning
Tenth week	Communication Strategies
Eleventh week	Global PR Campaign Examples
Twelfth week	Global PR Campaign Examples
Thirteenth week	Team Discussion
Fourteenth week	Final Team Project Presentations
Fifteenth week	Final Exam
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	New Waves of Korean Culture	Course Number	0006404001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	Dept. of Korean Language & Literature /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[15-211:금(4-5A)(5B-6)]
Office hours			

[1] Outline / Purpose

This course is aimed to examine the issues having emerged in Korean society since 2000 through reviewing relevant movies in an effort to diagnose the present and forecast the future of Korea. In particular, a focus is placed on the values and lives of the Koreans in Korea that has entered into a multi-cultural society and thus on a way to internationally balanced perspective and the value of integration and collaboration will be sought.

[2] Course Learning Outcomes

This course is aimed to examine the issues having emerged in Korean society since 2000 through reviewing relevant movies in an effort to diagnose the present and forecast the future of Korea. In particular, a focus is placed on the values and lives of the Koreans in Korea that has entered into a multi-cultural society and thus on a way to internationally balanced perspective and the value of integration and collaboration will be sought.

[3] Class Delivery Method

This course is made up of lectures and group project. Each student group has to make a presentation at least once. Topic for presentation can be chosen in each group, but has to be related to the contents of lecture. It is expected that presentation will reflect a group's perspective on a specific issue or topic. In addition, each team has to establish its own stance on the theme of lecture and debate with other groups. No assignment will be given to individual students and final test will be given once in the last week of the course.

Attendance(20%), Team Project(40%), Test(40%)

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	0 %	0 %	0 %	15 %	0 %	0 %	15 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	1. Ode to My Father and Contemporary Korean History
Second week	2. Mother and Korean Family(1)
Third week	3. The Attorney and Democratization
Fourth week	4. Secret Sunshine and Korean Religion
Fifth week	5. The Characteristics of Korean Movie Theater
Sixth week	6. Masquerade and Korean Leadership Styles
Seventh week	7. Secret Reunion and Reunification
Eighth week	8. Test
Ninth week	9. Helpless and Financial Crisis
Tenth week	10. New World and Social Justice
Eleventh week	11. Veteran and Social Network Services
Twelfth week	12. Sunny and Korean Teenager
Thirteenth week	13. Punch and Multi-Cultural Society
Fourteenth week	14. The Throne and Korean Family(2)
Fifteenth week	15. The Future of Korean Cinema
Sixteenth week	16. Final Test

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Comparative Understanding of China Japan Korea	Course Number	0010540001
Major / School Year	Faculty of Liberal Education / 전학년	completion division / Grade evaluation	/
Department/Professor	Dept. of Political Science & Int'l Relations /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[12-107:수(5B-6)(7-8A)]
Office hours			

[1] Outline / Purpose

Through the course, students aim to understand three key countries in Northeast Asia, China, Japan, and Korea in historical and comparative perspective. Both historical and contemporary issues will be discussed. The course will be composed of lectures, documentary and film watching, writing and presentation of essays on selected topics.

[2] Course Learning Outcomes

Understand three key countries in Northeast Asia, China, Japan, and Korea, in historical and comparative perspective,
Understand both historical and contemporary issues

[3] Class Delivery Method

Part 1 (13:30-14:45 Wednesday): Lecture on the topic: Students download the course materials from e-Learning and read them before the class

Part 2 (15:00-16:15 Wednesday): Q&A, additional lecture, and students' presentation and discussion

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
60 %	20 %	0 %	0 %	20 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	60 %	0 %	20 %	0 %	20 %	0 %

[4] Grading Policies

Exams + Essayes + Research + Attendance

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook	Course Materials uploaded at e-Learning	Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Students download course materials uploaded at e-Learning

[6] Weekly lesson plans

First week	1. Introduction Introduction of the course and your assignments and researches
Second week	2. Research on A Korean Soldier in Normandy and Presentation SBS special documentary, the film, My Way, based on the documentary: Each student does research on a Korean Soldier in Normandy, in terms of what happened to him, how he was in Normandy, why he was there, and what you came to know about international relations at the time. Write an essay, present and upload it at e-learning Q&A.
Third week	3. China, Korea, Japan in Comparative History (1) Lecture Note
Fourth week	4. China, Korea, Japan in Comparative History (2) Lecture Note
Fifth week	5. A Film Watching, Writing an Essay, and Presentations: (The Soong Sisters) Students will watch the film on China after the fall of Qing China and write an essay and upload it at e-learning Q&A.
Sixth week	6. Reform and Opening of China Lecture Note
Seventh week	7. MID EXAM
Eighth week	8. Party and State Structure of China Lecture Note
Ninth week	9. Korea: Liberation, War, Industrialization, and Democratization Lecture Note
Tenth week	10. A Film watching; Writing an Essay, and Presentations: 국제시장
Eleventh week	11. Political History of Japan Lecture Note
Twelfth week	12. International Politics of Okinawa Lecture Note
Thirteenth week	13. North Korea, Denuclearization, and Peace on the Korean Peninsula Lecture Note
Fourteenth week	14. FINAL EXAM: Presentation of Research Outcome on Selected Topic
Fifteenth week	15. FINAL EXAM: Presentation of Research Outcome on Selected Topic
Sixteenth week	

[7] Assignments

The first assignment	assignment	A Korean Soldier in Normandy	submission date	
	purpose			
	procedure & notice	Research on a Korean Soldier in Normandy: Present and Upload it at e-Learning Q&A		
	references			
The second assignment	assignment	Essays on Soong Sisters + International Market	submission date	
	purpose			
	procedure & notice	After watching the films of Soong Sisters and Kukje Sijang, write an essay, present and upload it at e-Learning Q&A		
	references			
The third assignment	assignment		submission date	
	purpose	Research on selected topic		
	procedure & notice	Students propose a research topic on China, Japan, Korea, and Present final research outcome at the end of semester as FINAL EXAM		
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Introduction to International Development and Cooperation	Course Number	0008884001
Major / School Year	International Development & Cooperation / 전학년	completion division / Grade evaluation	/
Department/Professor	Dept. of Public Administration / 타오	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[13-107:월(5B-6),화(8B-9)]
Office hours	Wednesdays 9:30~13:00	lecture room	

[1] Outline / Purpose

This course will introduce students to the field of international development cooperation (IDC) through different lenses: geopolitical relations, global economics, and public sector and nongovernmental organizational (NGOs) administration. Students will start with the history of IDC and its roots in the end of World War II, and progress up to the present and examine possible future scenarios. The course will also highlight South Korea's unique role in transitioning from a developing to a developed nation state, and how this affects the country's approach to IDC.

[2] Course Learning Outcomes

Students coming from many different disciplines may have little previous training in the fields that contribute to international cooperation and development: political science and diplomacy; government and non-governmental administration; and development economics. This course will provide students with a common vocabulary and conceptual foundations for further coursework in the major. By the end of the course, students should have achieved the following objectives:

- 1) Be able to identify key historical influences in current development practices;
- 2) Be able to identify the major international institutions that have played key roles in advancing cooperation among nations;
- 3) Be able to discuss how development is interlinked with cooperation from both a governmental and non-governmental perspective; and,
- 4) Be able to demonstrate critical thinking and comprehension of the complex nature of sustainable economic development and international cooperation.

[3] Class Delivery Method

Each student will be issued a course passport, and as progress is made through the semester, students will have their passports stamped. It will be important, therefore to bring your passports each week.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
70 %	25 %	0 %	0 %	0 %	0 %	5 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
20 %	0 %	70 %	0 %	10 %	0 %	0 %	0 %

[4] Grading Policies

Checkpoint 1: Test of general knowledge—at the end of the 4th week, all students will be given a comprehensive test of the courses materials presented up to that point. This will include a test of their mastery of the different historical players and organizations that have been integral to the field of IDC.

Percentage of total grade: 20%

Checkpoint 2: Application of theory—Between Weeks 5 and 9, we will be looking at development theories and how they shape our expectations of development success or failure. At the beginning of the 7th week, students will be given a hypothetical development scenario, where they will be asked to demonstrate how particular theories would be expected to play out under the conditions present in the scenario. This is somewhat similar to running a simulation. Students will be given one week after receiving their scenarios to produce a paper outlining their development predictions based on different theoretical applications. Percentage of total grade: 30%

Checkpoint 3: SWOT Analysis—From the 9th to 13th weeks, students will be learning from historical cases of IDC success and failure. At the end of the 12th week, they will be given a case not covered in class and will perform a SWOT (Strengths/Weaknesses, Opportunities/Threats) analysis for the case.

Percentage of total grade: 15%

Checkpoint 4: Presentation before an expert panel—Percentage of total grade: 15%

③ Percentage of grade evaluation

Exam	Attendance	Assignment
20 %	20 %	60 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	John Degenbol–Martijnussen and Poul Engberg–Pederson	Publisher	Zed Books.	Textbook	AID: Understanding International Development Cooperation.	Issued year	
(2)	Author	Interagency Task Force on Financing for Development	Publisher	United Nations	Textbook	Financing for Sustainable Development Report 2024	Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

Provided on line as needed

[6] Weekly lesson plans

First week	Week 1: (Monday is a holiday—so I will post materials on the eLearning site). The Beginning—What is International Development Cooperation? Activity: Discuss World War II, and lay the foundation for understanding the links between political battles, military goals, and the aftermath of the tenuous peace. Watch original footage of the beginnings of the Truman Doctrine and the creation of the Marshall Plan for Europe, and the American occupation forces in Japan and South Korea
Second week	Week 2: Who Cooperates? Reading: Chs. 1 & 2, AID: Understanding International Development Cooperation. Activity: Organizational Alphabet Soup.
Third week	Week 3: The Different Paths (and Philosophies) for Development Readings: Chs. 3 & 4, AID: Understanding International Development Cooperation. Activity: Possible guest speaker, Professor Choi Gyewon, about South Korea's approach to international cooperation.
Fourth week	Week 4: The Rise of the Non-Profit Sector in Development Cooperation Readings: Ch. 8, AID: Understanding Development Cooperation. Activity: First Checkpoint: Tuesday, March 25th.
Fifth week	Week 5: Introduction to Development Economics. Activity: Looking at the Solow Model of development: Focus on how the model shapes where investments are made in the developing world, and shortcomings. Readings: Video lectures from Prof. Tabarrok, George Mason. Deng and Pheng Seers and Sen
Sixth week	Week 6: How Markets and Trade are Supposed to Spur Development, and the Political Consequences. Activity: Look at the competing ideas on the good and bad that markets can do for developing countries. Readings: Peter Burnell (2004). "Foreign Aid Resurgent: New Spirit or Old Hangover?" United Nations University—WIDER. Chs. 6 & 7, AID: Understanding International Development Cooperation.
Seventh week	Week 7: Politics, Diplomacy and Institution Building Activity: How Politics falls short in achieving development goals (why?). Readings: "The Return to Foreign Aid". 2017. Journal of Development Studies, 53(7): 998–1018. Second Checkpoint Assignment Distributed.
Eighth week	Week 8: Can Democracy Develop?—Critiques of State Aid and the Rise of Civil Society. Activity: Looking at East Asia and its historical approach to development Readings: James C. Scott. 1999. "Introduction" and Part I. Seeing Like a State. New Haven: Yale University Press: pp. 1–84
Ninth week	Week 9: Evaluation—the first step in understanding success or failure. Here we focus on how success is determined, and by whom. Activity: Introduction to SWOT analysis as a method of evaluation. Readings: James C. Scott. 1999. "Thin Simplifications and Practical Knowledge: Metis". In Seeing Like a State. New Haven: Yale University Press: pp. 307–341. Ch. 11, AID: Understanding International Development Cooperation. DUE: Application of Theory Paper (April 29th)
Tenth week	Week 10: First case—Anatomy of a Success or Failure? Somalia. Activity: The Golden Handshake in Action in Mogadishu—But Time Marches On. Readings: "Development and Poverty in Sub-Saharan Africa". 2017. Tony Addison, Ville Pikkarainen, Risto Rönkkö, and Finn Tarp. United Nations University—WIDER. "Country Strategy for Development Cooperation, Somalia 2017–2020". Ministry of Foreign Affairs of Finland
Eleventh week	Week 11: Second Case—Haiti: the Impact of Natural Disaster Activity: Comparison of Haiti, Montserrat, and the Dominican Republic. Readings: Introduction. In Haiti: The Aftershocks of History. Laurent Dubois. New York: Metropolitan

	Books: pp. 1–14. Ch. 10, AID: Understanding International Development Cooperation.
Twelfth week	Week 12: Third Case—Vietnam—War, Recovery, and Resilience. Activity: Who Profits? Communist Capitalism and Poverty Reduction. Readings: Bruce Cumings. 2004. “Colonial Formations and Deformations: Korea, Taiwan, and Vietnam”. In Decolonization: Perspectives from Now and Then. London: Taylor and Francis: pp. 278–298. Chs. 12–13, AID: Understanding International Development Cooperation. Checkpoint 3 Assignment Distributed.
Thirteenth week	Week 13: Fourth Case—Mongolia: Natural Resources but Divided People. Activity: The Price of Independence—Is it too high? Readings: Ch. 14, AID: Understanding International Development Cooperation. “Mongolia: Land of Lost Opportunity”. Rhiannon Hoyle. March 21, 2016. Wall Street Journal. https://www.wsj.com/articles/mongolia-land-of-lost-opportunity-1458518881 . From Natural Resource Boom to Sustainable Economic Growth: Lessons for Mongolia. IMF Working Paper 15/90. April 30, 2015. Pranav Gupta, Grace Bin Li, and Jiangyan Yu. SWOT Analysis Due (May 27th).
Fourteenth week	Week 14: Preparing for student presentations and review.
Fifteenth week	FINAL PRESENTATIONS
Sixteenth week	Makeup classes as needed

[7] Assignments

The first assignment	assignment	Test	submission date	2025-03-25 Tue
	purpose	To make sure key concepts are understood		
	procedure & notice	In class exam.		
	references	Class materials from Weeks 1–3		
The second assignment	assignment	Mini Theory paper	submission date	2025-04-29 Tue
	purpose	To help students develop their theoretical analysis skills		
	procedure & notice	Paper will be turned in during class. Please do not come late.		
	references	Course materials and lectures		
The third assignment	assignment	SWOT analysis	submission date	2025-05-27 Tue
	purpose	To evaluate development organizations		
	procedure & notice	SWOT worksheet and analysis will be submitted in class.		
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Digital Convergence Safety Design Project	Course Number	0011589001
Major / School Year	Dept. of Creative Design / 전학년	completion division / Grade evaluation	/
Department/Professor	Division of Design /	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[16-313A:수(1)(2)(3)]
Office hours		lecture room	

[1] Outline / Purpose

● To experience the value of design by conceiving and designing a safety and healthcare-related product (or service) item based on an understanding of design theory and practical processes.

[2] Course Learning Outcomes

● To learn design-led problem-solving methodologies through theoretical lectures and practical exercises on design
 ● To propose ideas for solving problems related to the safety and health of our society through individual or team projects based on the design methodology learned.

[3] Class Delivery Method

● Theoretical lectures and practical exercises on design
 ● Individual and team projects
 ● Discussions, presentations, and workshops-based teaching methods

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
15 %	10 %	0 %	70 %	5 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
5 %	0 %	0 %	0 %	5 %	0 %	90 %	0 %

[4] Grading Policies

The learning achievement will be evaluated by considering students' attendance rate (20%), results of mid-term/final assignments (60%), and an overall assessment of students' understanding, participation, diligence, and completion in individual or team assignments given during class hours, excluding mid-term/final assignments.

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
 · 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Eric Ries	Publisher	한빛미디어	Textbook	Lean Startup	Issued year	
(2)	Author	Ash Maurya	Publisher	안그라픽스	Textbook	Running Lean	Issued year	
(3)	Author	Marc Stickdorn and Jakob Schneider	Publisher	안그라픽스	Textbook	This is Service Design Thinking	Issued year	

[Reference books]

(1)	Author	김병한	Publisher	가디언	Textbook	지구가 허락할 때까지 지속 생존을 위한 비즈니스 액티비스트 선언 어 스테크, 지구가 허락할 때까지	Issued year	
(2)	Author	도널드 노먼	Publisher	유크스리뷰	Textbook	도널드 노먼의 인간 중심 디자인	Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	What is Design? – Share a definition of design, convey content from papers and books & discussion. – General and business values of design: case studies & discussion. – Provide guidance on the approach to the course.
Second week	Understanding the Design Development Process and Methodology: – Understanding design thinking and service design. – Understanding the practical design processes (product/UX/UI/environment/branding, etc.) and sharing examples of development cases. – Introducing design visualization and presentation techniques: from idea sketches to presentations.
Third week	Defining the purpose and scope of the course: – Grouping for co-design workshop – Defining theme areas through co-design workshop – Selecting a topic and item of the individual project (Products, Services, Spaces, Visual Communication, etc.)
Fourth week	Sharing individual project topics and backgrounds: – Sharing the background and reasons for selecting the individual project topic and idea. – Providing feedback on the individual project topic and idea.
Fifth week	Developing various ideas for individual items in a project: – Sharing example projects or items in relation to safety design (project background and necessity, development results, and utilization). – Sharing idea sketches and reference data for individual items, and providing feedback.
Sixth week	Confirming individual project items– – Sharing advanced idea sketches and reference data for individual project items – Confirming individual project items and providing feedback
Seventh week	Lecture on the methodology for desk and field research on the finalized items: – Lecture and practical exercises on in-depth research methods before proceeding with the main design development.
Eighth week	Midterm Exam: – Presentation of the development background, necessity, and in-depth research (interviews and observational studies, etc.) results for individual project items.
Ninth week	Developing the design for individual items: – Propose advanced idea sketches and design directions based on research for the finalized individual items. – Share practical case examples of the work process corresponding to this stage.
Tenth week	Developing digital design for individual items based on feedback from idea sketches: – Updating the designs(at least 3 concepts for each item) based on feedback for the idea sketch.
Eleventh week	Sharing and selecting a design concept updated: – Confirming one design concept from three drafts for each individual project item – Sharing practical cases of the concept selection process.
Twelfth week	Lecture on visualization and presentation skills: – Providing feedback on updated design concepts. – Selecting the design award for submission and discussing the presentation format(if desired by the individual student). – Lecture on visualization and presentation skills for developing design concepts.
Thirteenth week	Sharing design concept updated and feedback: – Individual feedback on the design update concepts. – Reviewing the presentation data (images, video clips & reports) for the design award submission.
Fourteenth week	Sharing design concept updated and feedback: – Reviewing ideas of scenarios for product or service. – Reviewing the presentation data (images, video clips & reports) for the design award submission.
Fifteenth week	Final Exam: – Individual presentation of the final design outcome (background, research findings, design development process, final design outcome, scenario, data for design award submission etc.)
Sixteenth week	Supplementary week Sharing examples of presentation data for the design award submission(Available only in-person reviews) Reviewing the presentation data (images, video clips & reports) for the design award submission. Reviewing 3D data for mock-up (if possible, limited to selected representative items) * Primarily conducted through face-to-face reviews, but online reviews are available if necessary due to students' circumstances

[7] Assignments

The first assignment	assignment	Good design & Bad design according to my thoughts.	submission date	2025-03-19 Wed
	purpose	I would like to discuss on the values of design as perceived by each student, based on their understanding of design. This will be done by reflecting on their insights and engaging in a discussion.		
	procedure & notice	Presentation and discussion through PowerPoint slides (text & images)		
	references	No restrictions		
The second assignment	assignment	Research and Strategy Proposal for the Digital Convergence Safety Design Project	submission date	2025-04-16 Wed
	purpose	To assess the understanding of essential research methodologies before design development.		
	procedure & notice	Presentation about the research findings through PowerPoint slides (text & images)		

	references	No restrictions		
The third assignment	assignment	Presentation on the final outcomes of the Digital Convergence Safety Design project.	submission date	2025-06-11 Wed
	purpose	To evaluate individual design development achievements based on the theory and practical skills learned throughout the semester.		
	procedure & notice	Presentation of the development background, research results, and final design outcome effectively.		
	references	No restrictions		

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Programming Basics and Ideas	Course Number	0012026001
Major / School Year	Dept. of Creative Design / 전학년	completion division / Grade evaluation	/
Department/Professor	Division of Design / 변기범	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[28-402:화(7)(8)(9)]
Office hours		lecture room	

[1] Outline / Purpose

This course begins with a broad overview of various approaches to design. Through 'coding' and 'programming,' it enables students to explore new ways of expressing their design ideas, moving beyond conventional methods of creating graphics and images by using computer languages. Additionally, students will learn how to transform concepts primarily focused on form into operational designs through programming. To achieve this, different programming languages will be introduced in the early stages of the course. The main objective is to lay the foundation for future 'design work using coding' by providing fundamental knowledge of programming languages.

[2] Course Learning Outcomes

1. Learn the fundamentals of 'programming,' a computer language:
 - Understand basic structures and syntax
 - Apply programming skills to real-world problems
2. Develop problem-solving skills related to specific topics using the concepts learned.

[3] Class Delivery Method

The course covers both theoretical content related to programming languages and practical exercises. Progress is assessed through assignments, and students will practice programming on new topics as they go.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author	Kibeom Byun	Publisher		Textbook	Slide note	Issued year	2025
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	Orientation
Second week	Computational Thinking
Third week	Coding for Designer
Fourth week	Block-based Coding and Applications #1
Fifth week	Block-based Coding and Applications #2
Sixth week	Block-based Coding and Applications #3
Seventh week	Block-based Coding and Applications #4
Eighth week	Midterm
Ninth week	Basic Structures #1 – Variables
Tenth week	Basic Structures #2 – Operators
Eleventh week	Basic Structures #3 – Functions
Twelfth week	Basic structures #4 – Conditional Statement
Thirteenth week	Basic structures #5 – Loops
Fourteenth week	Coding for Design Solution
Fifteenth week	Final
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	xEV drive system control	Course Number	0011598001
Major / School Year	/ 전학년	completion division /Grade evaluation	/
Department/Professor	Dept. of Electrical Engineering / 최현규	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class / lecture room	[08-322:금(2B-3)] [08-438:목(7-8A)]
Office hours			

[1] Outline / Purpose

차량용 전동기의 구동 원리에 대해 이해하고, 이를 제어하기 위해 필요한 하드웨어 및 제어 이론들에 대해 학습한다. 주 학습 내용은 전동기와 인버터에 관련된 내용이 될 것으로 예상된다. 원활한 수강을 위해서는 전기 에너지 변환에 대한 기초 지식(회로 이론, 제어 이론, 전력 전자 공학 등)이 필요함.

[2] Course Learning Outcomes

차량 내 전동기의 역할과 구동 원리를 이해하고, 산업계의 트렌드를 살펴봄으로써 차량 업계에 대한 관심을 환기하도록 한다.

[3] Class Delivery Method

강의 / 시뮬레이션 실습 / 조별 활동

강의 교재는 이러닝을 통해 매주 제공하도록 함.

a) Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

b) Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

a) Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

- 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점
- 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	차량용 전동기의 쓰임새
Second week	기초 물리학
Third week	전동기의 구동 원리
Fourth week	전동기 모델 분석 1 - 토크 생성 원리
Fifth week	전동기 모델 분석 2 - 전기적 모델 유도
Sixth week	전동기 모델 분석 3 - 회전 좌표계 도입
Seventh week	시뮬레이션 실습 (Matlab 및 Simulink 환경 구성)
Eighth week	중간 고사
Ninth week	전동기의 분류 - 1: 직류 전동기
Tenth week	전동기의 분류 - 1: 직류 전동기 (모델링 기반 시뮬레이션 구축)
Eleventh week	전동기의 분류 - 3: 교류 전동기 (모델링 기반 시뮬레이션 구축)
Twelfth week	전동기 제어: 인버터 동작 원리
Thirteenth week	전동기 제어: 전류 제어기 (모델 기반 제어기 설계)
Fourteenth week	전동기 제어: 속도 제어기 (모델 기반 제어기 설계)
Fifteenth week	기말 고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			

Syllabus

2025 - 1학기

Date : 2025.02.06

Time : AM 9:12

CourseTitle	Vehicle dynamics and control	Course Number	0011599001
Major / School Year	/ 전학년	completion division /Grade evaluation	/
Department/Professor	Dept. of Electrical Engineering / 이동길	Grades/Lecture/ Practice	3 / 3 / 0
Phone Number		A weekday / class /	[08-322:월(7-8A),목(8B-9)]
Office hours		lecture room	

[1] Outline / Purpose

본 교과목은 자율주행자동차의 제어기 설계를 위해 상태변수 공간(State Space)에서 시스템의 동적 특성을 분석하는 방법을 학습한다.

또한, 상태변수를 활용하여 제어기 및 관측자를 설계하는 방법을 다루며, MATLAB과 Simulink를 이용한 동적 시스템 시뮬레이션 및 제어기 설계 기법을 익힌다.

추가적으로, Controllability(제어 가능성)와 Observability(관측 가능성) 판별을 통해 시스템을 해석하고, 최적 제어 이론도 간략히 소개한다.

[2] Course Learning Outcomes

자율주행자동차의 제어를 위해 먼저 고전 제어 기법을 정리 및 검토한 후, 현대 제어 이론과 실제 응용을 학습한다.

주요 학습 내용은 상태공간(State Space)에서의 시스템 특성 분석 및 제어기 설계 방법이며, 자율주행 자동차의 제어기 및 관측기 설계를 최종 목표로 한다.

[3] Class Delivery Method

강의 자료(Handout)와 강의식 수업을 기반으로 진행되며, MATLAB 및 Simulink를 활용한 실습 과제를 수행한다.

구체적으로, 고전 제어 기법 리뷰, 상태공간에서의 모델링 방법, 시스템 특성 분석, 제어기 및 관측기 설계 방법을 학습한다.

이 과정에서 Pole Placement 기법, LQR(Linear Quadratic Regulator), Kalman Filter, LQG(Linear Quadratic Gaussian) 등의 기법을 활용하여 자율주행 자동차의 제어 시스템 설계에 대한 이해를 높인다.

① Method of Teaching

Lecture	Discussion	Seminar	Practice	Audiovisual	Material	Field trip	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

② Using Tools

Blackboard	OHP	Slide	Chart	Video	Audio	Computer	The others
0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

[4] Grading Policies

① Percentage of grade evaluation

Exam	Attendance	Assignment
60 %	20 %	20 %

· 출석성적 : 20점 만점 (학칙시행세칙 제56조 제2항) → 일반 과목(3학점) 1시간 결석시 1/3점 감 → 3시간 결석시 1점 감점

· 실제 수업시간수의 1/3 이상 결석한 자 및 부정행위자는 시험 등 성적에 불구 학점인정 불가 (학생시행세칙 제56조 제3항)

[5] Main teaching material & Reference books

[Main teaching material]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	

[Reference books]

(1)	Author		Publisher		Textbook		Issued year	
(2)	Author		Publisher		Textbook		Issued year	
(3)	Author		Publisher		Textbook		Issued year	
(4)	Author		Publisher		Textbook		Issued year	
(5)	Author		Publisher		Textbook		Issued year	

[Other books]

[6] Weekly lesson plans

First week	[제어공학 리뷰 1] 제어 시스템의 기본 개념 복습 피드백 제어 시스템의 개념 및 필요성 라플라스 변환과 전달함수 개념 복습 페루프 및 개루프 시스템의 차이점 분석
Second week	[제어공학 리뷰 2] 주파수 응답 및 주파수 영역 해석 (Bode Plot, Nyquist Plot) 안정성 판별 방법 (Routh-Hurwitz, Nyquist Criterion) PID 제어기 설계 및 조정 방법 고전 제어 기법의 한계와 상태공간 접근법 개요
Third week	[State-space design] 상태공간 모델링 개요 및 장점 상태변수의 개념과 상태방정식 도출 방법 연속 및 이산시간 시스템의 상태공간 표현 자율주행 시스템의 예제 모델링
Fourth week	[State-space design analysis] 상태공간에서의 시스템 응답 해석 상태전이 행렬과 해석적 계산 제어 가능성 (Controllability) 및 관측 가능성 (Observability) 개념 및 판별법
Fifth week	[State-space controller design 1] 피드백 제어와 상태공간 제어의 개념 비교 극 배치 (Pole Placement) 기법을 이용한 상태 피드백 제어기 설계 페루프 시스템의 극 위치 조정을 통한 성능 개선
Sixth week	[State-space controller design 2] 상태공간 피드백 설계를 위한 제어입력 설계 출력 피드백 및 상태 관측기의 필요성 최적 제어를 위한 성능 지표 설정
Seventh week	[State-space observer design] 상태 추정 (State Estimation)의 필요성 및 개념 관측기 (Observer) 설계 및 Luenberger Observer 적용
Eighth week	중간고사
Ninth week	[LQR/Kalman Filter/LQG 1] 선형 이차 레귤레이터 (LQR, Linear Quadratic Regulator)의 개념 성능 지수 및 비용 함수 최적화 기법 Riccati 방정식을 이용한 최적 상태 피드백 제어기 설계
Tenth week	[LQR/Kalman Filter/LQG 2] 칼만 필터 (Kalman Filter)의 개념 및 필요성 확률적 필터링 기법과 노이즈 환경에서의 상태 추정 LQG (Linear Quadratic Gaussian) 제어 시스템의 개념
Eleventh week	[차량 시스템 모델링 1] 자동차의 동역학 개요 차량의 질량 중심, 바퀴 모델링, 운동 방정식 유도 차량의 Longitudinal Dynamics (종방향 동역학) 모델링
Twelfth week	[차량 시스템 모델링 2] 차량의 Lateral Dynamics (횡방향 동역학) 모델링 타이어 모델 (Magic Formula, Linear Tire Model) 차량의 조향 모델 및 주행 안정성 분석
Thirteenth week	[차량 시스템 종방향 제어기 설계] 차량의 속도 및 가속 제어 개념 크루즈 컨트롤 (Cruise Control) 시스템 설계
Fourteenth week	[차량 시스템 횡방향 제어기 설계] 자율주행 차량의 조향 제어 개념 횡방향 제어를 위한 LQR 및 모델 예측 제어 차선 유지 및 차선 변경 알고리즘 설계
Fifteenth week	기말고사
Sixteenth week	

[7] Assignments

The first assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			
The second	assignment		submission date	
	purpose			

assignment	procedure & notice			
	references			
The third assignment	assignment		submission date	
	purpose			
	procedure & notice			
	references			