

Advanced Ceramic Devices and Processing

Course Name	Course type (credit/hours)	전선(3/3)	Course code	0077
	Target students Division/major/grade	첨단신소재공학과/3학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(팔207) 수C(팔207)(팔207)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	세라믹재료		
	Related basic courses	재료과학, 재료열역학, 재료물리학		
	Recommanded concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)	박진성			
	Office Room Number	다차원 에너지재료 연구실	Office phone Number	2467	e-mail
	Office hours		Homepage address	https://ownerp0424.wixsite.com/my-site	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

2. Course Objectives

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

재료과학I, 세라믹재료

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam	1	45	
final exam	1	45	
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Principles of Ceramic Processing	James Reed		
Sub	Ceramic Processing and Sintering	M. N. Rahaman		
Ref.	Modern Ceramic Engineering	D. W. Richardson		

10. Class system and Class shedule

1) 세라믹 소재를 활용한 전자/에너지 응용소재에 대한 강의 2) 세라믹 공정에 대한 강의

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Review on Ceramic Materials	E	박진성			
2	Overview on Ceramic Processing	E	박진성			
3	Powder Preparation	E	박진성			
4	Powder Characterization	E	박진성			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Additives	E	박진성			
6	Colloidal Processing I	E	박진성			
7	Colloidal Processing II	E	박진성			
8	Mid-term	E	박진성			
9	Green body I	E	박진성			
10	Green body II	E	박진성			
11	Sintering I	E	박진성			
12	Sintering II	E	박진성			
13	Electrical Applications of Ceramics I	E	박진성			
14	Electrical Applications of Ceramics II	E	박진성			
15	Energy Application of Ceramics	E	박진성			
16	Final	E	박진성			

11. Other items of notification

Advanced Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)		Course code	X084
	Target students Division/major/grade	/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(성333) 목A(성333)(성333)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Philip Chivers (조교수/대학 다산학부대학)			
	Office Room Number	성호관 419	Office phone Number	031-219-2831	e-mail
	Office hours	Mon 10.30-11.30, Tues 12.00-13.00, Weds 10.30 - 11.30	Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Advanced English 1 is a course for students with advanced English skills. Students must pass an interview to be granted enrollment to this class. This course concentrates on English writing and speaking with an emphasis on discussion and creative projects. Speaking lessons include pair work, small group tasks as well as class discussions, activities, and debates. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class

2. Course Objectives

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations and develop skills for conversational debate. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

(1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)

(2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)

(3)Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)

(4)Follow the steps in the writing process. (related to P07)

3. Class types and activities

Speaking lessons include pair work, small group discussions, and task-based communicative activities. Writing lessons focus on paragraph-writing skills, and include lectures, in-class writing practice and homework writing assignments.

4. Teaching Method

- | | |
|--|--|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input checked="" type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (The class will feature lectures, pair-work, group discussions, and whole-class discussions. | |

5. Support Systems in Use

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input checked="" type="checkbox"/> others (Students will use Google Sheets, Docs and Slides to | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input checked="" type="checkbox"/> others (Task Based Learning. We will use discussion groups |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.
- * We often use Google docs. Make sure that you are prepared to access Google apps.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance – 2% for 2 unexcused absences and –2% for each additional unexcused absence. 3 lates constitutes 1 absent
midterm exam		15	Mid Term Exam from units 1,2,4 & 5 plus an academic paragraph
final exam		15	Final Exam from units 8,9,11 & 12
quiz		20	Online writing quiz about questions covered in the paragraph section of the course. Academic paragraph (11–14 sentences) 10% quiz + 10% paragraph
presentation		10	1:1 Formal Speaking Test
discussion			
homework		20	Video Project (15%) Script for the video (5%)
etc		10	Daily class participation. Being active in learning and helping others learn
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 3 (3rd Edition)	Lee, C., Johannsen, Kristin.L., Chase, R.T.	National Geographic Learning, Cengage Learning	2020

10. Class system and Class shedule

<p>Competencies</p> <p>By the end of the course, students will be expected to be able to:</p> <ul style="list-style-type: none"> ?Understand the fundamentals of English grammar and punctuation. ?Engage in conversations about various topics ?Support their own opinions with facts ?Maintain a conversation by developing various topics <p>Objectives</p> <p>To achieve these competencies, students will develop skills in the categories listed below:</p> <ul style="list-style-type: none"> ?Learn vocabulary about a number of different topics ?Understand grammar to engage in topics in an advanced rhetoric ?Practice conversations about a number of different topics <ol style="list-style-type: none"> (1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly at a higher level of English. (2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities, including debates and discussions. (3)Use appropriate vocabulary and grammar to express their ideas about the topics. (4)Follow the steps in the writing process. (5)Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (6)Write using complete sentences, avoiding fragments and run-on sentences. (7)Write using capital letters, periods, commas, and other punctuation correctly.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction & Syllabus information Self-Introductions. Writing: Formatting, simple and compound sentences	E	Philip Chivers	Online		
2	Writing: Capitalisation, Topic sentences, complex sentences. Writing process, parts of a paragraph Practice paragraph	E	Philip Chivers	Online		
3	Writing: TOEFL writing process practice. Writing: Writing mechanics	E	Philip Chivers	Online		
4	World English: Unit 1	E	Philip Chivers	Online		
5	World English: Unit 2	E	Philip Chivers	Online		
6	World English: Unit 4	E	Philip Chivers	Online		
7	World English: Unit 5	E	Philip Chivers	Online		
8	Midterm Exam	E	Philip Chivers	Online		
9	World English: Unit 8. Video Project	E	Philip Chivers	Online		
10	World English: Unit 9. Video Project	E	Philip Chivers	Online		
11	World English: Unit 9. Video Project Unit 6: Goals. Debate foundations Video Project: Topics	E	Philip Chivers	Online		
12	World English: Unit 11	E	Philip Chivers	Online		
13	Watch Videos	E	Philip Chivers	Online		
14	World English: Unit 12	E	Philip Chivers	Online		
15	Speaking Test	E	Philip Chivers	Online		
16	Final Exam	E	Philip Chivers	Online		

11. Other items of notification

1. Students are encouraged to review the class material in advance of the coming class.
2. Students are encouraged to engage in active participation in class discussions.

Advanced Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)	Course code	X085
	Target students Division/major/grade	/1학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(성 105) 목B(성 105)(성 105)	English Grade	A(100%English)
Reference to this course	Prerequisite courses			
	Related basic courses			
	Recommmaded concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)		Joshua Houser (조교수/대학 다산학부대학)		
	Office Room Number	성호관 421호	Office phone Number	2844	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course provides students with an opportunity to improve the rreading and listening skills in English. Students will be also able to increase the awareness of other cultures including the North American culture by reading articles about a wide variety ofcurrentissues.

2. Course Objectives

3. Class types and activities

- (1) Students are required to hand in a variety of homework assignments such a summary of the textbook material or a short report on related topics.
- (2) Students are expected to choose a chapter and make a group presentation on a related topic.
- (3) Regular quizzes (four quizzes) will be given in class to ensure that students are learning the course material.
- (4) Students are responsible for attending class regularly. Students must obtain specific information about the material covered in class on the day they were absent and hand in all the homework assignments. Furthermore, unexcused absences will have the following consequences on the students' final score:
- 1 unexcused absence = 0 point reduction
 - 2 unexcused absence = 2 point reduction
 - 3 unexcused absence = 3 point reduction
 - 4 unexcused absence = 4 point reduction
- cf. 2 times late = 1 unexcused absence
arriving more than 20 minutes late = 1 unexcused absence
- (5) Absences are excused only in the case of a medical excuse verified by a doctor's note (prescriptions are not allowed), a military excuse, or a death in the family.

4. Teaching Method

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|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others () | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		20	
final exam		20	
quiz		30	
presentation		10	
discussion		10	
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	World English 2 Third Edition	Martin Milner	Cengage Learning	2014

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	course intro	K	Joshua Houser			
2	Chapter 1 (Reading 1)	K	Joshua Houser			
3	Chapter 1 (Reading 3)	K	Joshua Houser			
4	Chapter 2 (Reading 1)	K	Joshua Houser			
5	Chapter 2 (Reading 2)	K	Joshua Houser			
6	Chapter 3 (Reading 1/2)	K	Joshua Houser			
7	Chapter 4 (Reading 2)	K	Joshua Houser			
8	mid-term exam	K	Joshua Houser			
9	Chapter 5 (Reading 1)	K	Joshua Houser			
10	Chapter 5 (Reading 2)	K	Joshua Houser			
11	Chapter 6 (Reading 1)	K	Joshua Houser			
12	Chapter 6 (Reading 2)	K	Joshua Houser			
13	Chapter 7 (Reading 1)	K	Joshua Houser			
14	Chapter 7 (Reading 2)	K	Joshua Houser			
15	Chapter 9 (Reading 2)	K	Joshua Houser			
16	final exam	K	Joshua Houser			

11. Other items of notification

Advanced Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)	Course code	X086
	Target students Division/major/grade	/1학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(성 104) 목B(성 104)(성 104)	English Grade	A(100%English)
Reference to this course	Prerequisite courses			
	Related basic courses			
	Recommended concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)		Philip Chivers (조교수/대학 다산학부대학)		
	Office Room Number	성호관 419	Office phone Number	031-219-2831	e-mail
	Office hours	Mon 10.30-11.30, Tues 12.00-13.00, Weds 10.30 - 11.30	Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Advanced English 1 is a course for students with advanced English skills. Students must pass an interview to be granted enrollment to this class. This course concentrates on English writing and speaking with an emphasis on discussion and creative projects. Speaking lessons include pair work, small group tasks as well as class discussions, activities, and debates. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class

2. Course Objectives

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations and develop skills for conversational debate. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

(1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)

(2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)

(3)Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)

(4)Follow the steps in the writing process. (related to P07)

Computer Programming for Science Computation

Course Name	Course section (credit/hours)	Required course(3/3)			
	course code	B007	subject code	CMP104	
	course item		course component		
	Target students Division/major/grade		opening semester	2024 2ND SEMESTER	
	Class time and classroom	Mon B(Pa1323)Thu B(Pa1323)		English Grade	A(100%English)
Reference to this course	Credit composition	Theory(2) + Design(0) + Practice(1)			
	Prerequisite courses	None			
	Related basic courses	None			
	Recommanded concurrent courses	None			
	Related advanced course	Operations Research, Data Analysis and Practice			
Instructor	Name (division)	Seulgi Jung(Industrial Engineering)			
	Office Room Number	팔달관 811호	Extension Number	2425	e-mail sgjung@ajou.ac.kr
	Office hour	by appointment		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Course Introduction

This course covers the fundamentals of programming in Python. In the course, you will thoroughly learn the basics of Python programming, including math and computation, data input and output, script utilization, and graph plotting.

2. Course Objectives & course outcome

The goal of this course is to learn how to program in Python. Python integrates computation, visualization, and programming in an easy-to-use environment where problems and solutions are expressed in familiar mathematical notation. The students will have Python handy to deal with the following tasks in the end of course:

- .Math and computation
- .Algorithm development
- .Modeling, simulation, and prototyping
- .Data analysis, exploration, and visualization
- .Scientific and engineering graphics

3. Class types and activities

- Each week, there will be a 1.5-hour lecture conducted by the professor.
- There will be a 1.5-hour practical session.
- > Practical assignments will be posted at the beginning of each practical session.
- > Students will use Python to implement these assignments and submit their results to the teaching assistant.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> AjouBb | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> online content | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) | <input type="checkbox"/> TBL(Team Based Learning) |
| <input type="checkbox"/> UR(Undergraduate Research) | <input type="checkbox"/> FL(Flipped Learning) | <input type="checkbox"/> DSAL(Data Sciencd Active Learning) |
| <input type="checkbox"/> others | | |

7. Evaluation method of course outcome

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	1/4 이상 결석 시 F학점
midterm exam	1	30	지필고사
final exam	1	30	지필고사
quiz	2	20	각 10%

7. Evaluation method of course outcome

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
presentation			
discussion			
homework			
etc		10	수업 및 실습 참여도
report			
study hours			

8. Textbook and Reference material

Main/Sub	Title	Writer	Publisher	Publication year
Main	Lecture notes			
Ref.	어서와 파이썬은 처음이지	천인국	인피니트 북스	2019

9. Class system and Class shedule

<p>Introduction to Python Variables and calculations Selection, iteration Functions Lists, tuples, dictionaries Classes and objects GUI programming using Tkinter Built-in functions and modules Inheritance and polymorphism Files and exception handling Recursion, sorting, searching NumPy and Matplot</p>

< Schedule >

* language : K-korean, E-English

Weeks	Title of lecture	language	time distribution(minutes)			Teaching Method	evaluation method
			theory	design	experiment practice		
1	Course introduction	E	3		2	Test & Practice	Practice evaluation
2	Introduction to Python	E	3		2	Test & Practice	Practice evaluation
3	Variables and calculations	E	3		2	Test & Practice	Practice evaluation

< Schedule >

* language : K-korean, E-English

Weeks	Title of lecture	language	time distribution(minutes)			Teaching Method	evaluation method
			theory	design	experiment practice		
4	Selection, iteration	E	3		2	Test & Practice	Practice evaluation
5	Functions	E	3		2	Test & Practice	Practice evaluation
6	Functions	E	3		2	Test & Practice	Practice evaluation
7	Lists, tuples, dictionaries	E	3		2	Test & Practice	Practice evaluation
8	Midterm exam	E	3			Exam	Exam
9	Classes and objects	E	3		2	Test & Practice	Practice evaluation
10	GUI programming using Tkinter	E	3		2	Test & Practice	Practice evaluation
11	Built-in functions and modules	E	3		2	Test & Practice	Practice evaluation
12	Inheritance and polymorphism	E	3		2	Test & Practice	Practice evaluation
13	Files and exception handling	E	3		2	Test & Practice	Practice evaluation
14	Recursion, sorting, searching	E	3		2	Test & Practice	Practice evaluation
15	NumPy and Matplot	E	3		2	Test & Practice	Practice evaluation
16	Final exam	E	3			Exam	Exam

10. Contribution index of the course for attaining ABEEK program outcomes

course outcome	contribution scale
수학, 기초과학, 공학 및 정보기술의 지식을 쌓고, 그 지식 가운데에서 주어진 기계공학전공 문제에 필요한 것을 파악하고 응용하여 문제해결에 이르게 하는 능력	
기계공학 분야에서 필요한 데이터를 분석하며, 사실이나 가설을 입증하기 위하여 실험을 계획하고 수행하는 지식을 쌓고, 그 지식을 기초로 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	
기계공학 분야에서 필요한 공학 문제들을 인식하며, 이를 공식화하고 해결할 수 있는 지식을 쌓고, 그 지식 가운데에서 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	
기계공학 분야에서 공학실무에 필요한 최신 정보, 연구결과, 도구 등을 사용할 수 있는 지식을 쌓고, 그 지식을 기초로 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	
기계공학 분야에서 필요한 현실적 제한조건을 반영하여 시스템, 요소, 공정을 설계할 수 있는 지식을 쌓고, 그 지식을 기초로 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제를 해결에 이르게 하는 능력	
복합 학제적 팀의 한 구성원으로서의 역할을 해낼 수 있는 역량을 쌓고, 그 역량에 기초하여 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	

10. Contribution index of the course for attaining ABEEK program outcomes

course outcome	contribution scale
기계공학 분야에서 적절한 화법과 논리적 표현으로 자신의 생각을 명료하게 전달하고 상대방과 효과적으로 의사소통할 수 있는 능력	
기계공학 분야의 공학적 해결방안이 사회, 경제, 환경, 세계에 미치는 영향을 예측할 수 있으며, 이들을 구분하여 설명할 수 있는 능력	
기계공학 분야의 종사자로서 그리고 사회의 책임의식이 있는 구성원으로서 직업적 책임의식과 윤리적 책임의식의 당위성을 인식할 수 있는 능력	
기계공학 분야에서 평생교육의 필요성을 사회(기술의 변화속도 포함)와 관련지어 설명할 수 있고, 평생교육 관점에서 진로를 설계할 수 있는 능력	

11. Analysis of improved matters for the previous semester

<p>해당 사항 없음</p>

13. Reference items

<p>.</p>

Computer Programming for Science Computation

Course Name	Course section (credit/hours)	Required course(3/3)			
	course code	B008	subject code	CMP104	
	course item		course component		
	Target students Division/major/grade		opening semester	2024 2ND SEMESTER	
	Class time and classroom	Tue B(Pa1323)Thu A(Pa1323)		English Grade	A(100%English)
Reference to this course	Credit composition	Theory(2) + Design(0) + Practice(1)			
	Prerequisite courses	None			
	Related basic courses	None			
	Recommanded concurrent courses	None			
	Related advanced course	Operations Research, Data Analysis and Practice, I			
Instructor	Name (division)	Seulgi Jung(Industrial Engineering)			
	Office Room Number	팔달관 811호	Extension Number	2425	e-mail sgjung@ajou.ac.kr
	Office hour	by appointment		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Course Introduction

This course covers the fundamentals of programming in Python. In the course, you will thoroughly learn the basics of Python programming, including math and computation, data input and output, script utilization, and graph plotting.

2. Course Objectives & course outcome

The goal of this course is to learn how to program in Python. Python integrates computation, visualization, and programming in an easy-to-use environment where problems and solutions are expressed in familiar mathematical notation. The students will have Python handy to deal with the following tasks in the end of course:

- .Math and computation
- .Algorithm development
- .Modeling, simulation, and prototyping
- .Data analysis, exploration, and visualization
- .Scientific and engineering graphics

3. Class types and activities

- Each week, there will be a 1.5-hour lecture conducted by the professor.
- There will be a 1.5-hour practical session.
- > Practical assignments will be posted at the beginning of each practical session.
- > Students will use Python to implement these assignments and submit their results to the teaching assistant.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> AjouBb | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> online content | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) | <input type="checkbox"/> TBL(Team Based Learning) |
| <input type="checkbox"/> UR(Undergraduate Research) | <input type="checkbox"/> FL(Flipped Learning) | <input type="checkbox"/> DSAL(Data Sciencd Active Learning) |
| <input type="checkbox"/> others | | |

7. Evaluation method of course outcome

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	1/4 이상 결석 시 F학점
midterm exam	1	30%	지필고사
final exam	1	30%	지필고사
quiz	2	20%	각 10%

7. Evaluation method of course outcome

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
presentation			
discussion			
homework			
etc		10%	수업 및 실습 참여도
report			
study hours			

8. Textbook and Reference material

Main/Sub	Title	Writer	Publisher	Publication year
Ref.	어서와 파이썬은 처음이지	천인국	인피니티 북스	2019
Main	Lecture notes			

9. Class system and Class shedule

<p>Introduction to Python Variables and calculations Selection, iteration Functions Lists, tuples, dictionaries Classes and objects GUI programming using Tkinter Built-in functions and modules Inheritance and polymorphism Files and exception handling Recursion, sorting, searching NumPy and Matplot</p>

< Schedule >

* language : K-korean, E-English

Weeks	Title of lecture	language	time distribution(minutes)			Teaching Method	evaluation method
			theory	design	experiment practice		
1	Course introduction		3		2	Test & Practice	
2	Introduction to Python		3		2	Test & Practice	
3	Variables and calculations		3		2	Test & Practice	

< Schedule >

* language : K-korean, E-English

Weeks	Title of lecture	language	time distribution(minutes)			Teaching Method	evaluation method
			theory	design	experiment practice		
4	Selection, iteration		3		2	Theory & Practice	
5	Functions		3		2	Test & Practice	
6	Functions		3		2	Theory & Practice	
7	Lists, tuples, dictionaries		3		2	Test & Practice	
8	Midterm exam		3			Exam	
9	Classes and objects		3		2	Theory & Practice	
10	GUI programming using Tkinter		3		2	Test & Practice	
11	Built-in functions and modules		3		2	Theory & Practice	
12	Inheritance and polymorphism		3		2	Test & Practice	
13	Files and exception handling		3		2	Theory & Practice	
14	Recursion, sorting, searching		3		2	Test & Practice	
15	NumPy and Matplot		3		2	Test & Practice	
16	Final exam		3			Exam	

10. Contribution index of the course for attaining ABEEK program outcomes

course outcome	contribution scale
수학, 기초과학, 공학 및 정보기술의 지식을 쌓고, 그 지식 가운데에서 주어진 기계공학전공 문제에 필요한 것을 파악하고 응용하여 문제해결에 이르게 하는 능력	
기계공학 분야에서 필요한 데이터를 분석하며, 사실이나 가설을 입증하기 위하여 실험을 계획하고 수행하는 지식을 쌓고, 그 지식을 기초로 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	
기계공학 분야에서 필요한 공학 문제들을 인식하며, 이를 공식화하고 해결할 수 있는 지식을 쌓고, 그 지식 가운데에서 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	
기계공학 분야에서 공학실무에 필요한 최신 정보, 연구결과, 도구 등을 사용할 수 있는 지식을 쌓고, 그 지식을 기초로 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	
기계공학 분야에서 필요한 현실적 제한조건을 반영하여 시스템, 요소, 공정을 설계할 수 있는 지식을 쌓고, 그 지식을 기초로 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제를 해결에 이르게 하는 능력	
복합 학제적 팀의 한 구성원으로서의 역할을 해낼 수 있는 역량을 쌓고, 그 역량에 기초하여 주어진 기계공학 문제에 필요한 것을 파악하고 응용하여 문제 해결에 이르게 하는 능력	

10. Contribution index of the course for attaining ABEEK program outcomes

course outcome	contribution scale
기계공학 분야에서 적절한 화법과 논리적 표현으로 자신의 생각을 명료하게 전달하고 상대방과 효과적으로 의사소통할 수 있는 능력	
기계공학 분야의 공학적 해결방안이 사회, 경제, 환경, 세계에 미치는 영향을 예측할 수 있으며, 이들을 구분하여 설명할 수 있는 능력	
기계공학 분야의 종사자로서 그리고 사회의 책임의식이 있는 구성원으로서 직업적 책임의식과 윤리적 책임의식의 당위성을 인식할 수 있는 능력	
기계공학 분야에서 평생교육의 필요성을 사회(기술의 변화속도 포함)와 관련지어 설명할 수 있고, 평생교육 관점에서 진로를 설계할 수 있는 능력	

11. Analysis of improved matters for the previous semester

13. Reference items

3. Class types and activities

Speaking lessons include pair work, small group discussions, and task-based communicative activities. Writing lessons focus on paragraph-writing skills, and include lectures, in-class writing practice and homework writing assignments.

4. Teaching Method

- | | |
|--|--|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input checked="" type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (The class will feature lectures, pair-work, group discussions, and whole-class discussions. | |

5. Support Systems in Use

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input checked="" type="checkbox"/> others (Students will use Google Sheets, Docs and Slides to | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input checked="" type="checkbox"/> others (Task Based Learning. We will use discussion groups |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.
- * We often use Google docs. Make sure that you are prepared to access Google apps.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance – 2% for 2 unexcused absences and –2% for each additional unexcused absence. 3 lates constitutes 1 absent
midterm exam		15	Mid Term Exam from units 1,2,4 & 5 plus an academic paragraph
final exam		15	Final Exam from units 8,9,11 & 12
quiz		20	Online writing quiz about questions covered in the paragraph section of the course. Academic paragraph (11–14 sentences) 10% quiz + 10% paragraph
presentation		10	1:1 Formal Speaking Test
discussion			
homework		20	Video Project (15%) Script for the video (5%)
etc		10	Daily class participation. Being active in learning and helping others learn
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 3 (3rd Edition)	Lee, C., Johannsen, Kristin.L., Chase, R.T.	National Geographic Learning, Cengage Learning	2020

10. Class system and Class shedule

<p>Competencies</p> <p>By the end of the course, students will be expected to be able to:</p> <ul style="list-style-type: none"> ?Understand the fundamentals of English grammar and punctuation. ?Engage in conversations about various topics ?Support their own opinions with facts ?Maintain a conversation by developing various topics <p>Objectives</p> <p>To achieve these competencies, students will develop skills in the categories listed below:</p> <ul style="list-style-type: none"> ?Learn vocabulary about a number of different topics ?Understand grammar to engage in topics in an advanced rhetoric ?Practice conversations about a number of different topics <ol style="list-style-type: none"> (1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly at a higher level of English. (2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities, including debates and discussions. (3)Use appropriate vocabulary and grammar to express their ideas about the topics. (4)Follow the steps in the writing process. (5)Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (6)Write using complete sentences, avoiding fragments and run-on sentences. (7)Write using capital letters, periods, commas, and other punctuation correctly.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction & Syllabus information Self-Introductions. Writing: Formatting, simple and compound sentences	E	Philip Chivers	Online		
2	Writing: Capitalisation, Topic sentences, complex sentences. Writing process, parts of a paragraph Practice paragraph	E	Philip Chivers	Online		
3	Writing: TOEFL writing process practice. Writing: Writing mechanics	E	Philip Chivers	Online		
4	World English: Unit 1	E	Philip Chivers	Online		
5	World English: Unit 2	E	Philip Chivers	Online		
6	World English: Unit 4	E	Philip Chivers	Online		
7	World English: Unit 5	E	Philip Chivers	Online		
8	Midterm Exam	E	Philip Chivers	Online		
9	World English: Unit 8. Video Project	E	Philip Chivers	Online		
10	World English: Unit 9. Video Project	E	Philip Chivers	Online		
11	World English: Unit 9. Video Project Unit 6: Goals. Debate foundations Video Project: Topics	E	Philip Chivers	Online		
12	World English: Unit 11	E	Philip Chivers	Online		
13	Watch Videos	E	Philip Chivers	Online		
14	World English: Unit 12	E	Philip Chivers	Online		
15	Speaking Test	E	Philip Chivers	Online		
16	Final Exam	E	Philip Chivers	Online		

11. Other items of notification

1. Students are encouraged to review the class material in advance of the coming class.
2. Students are encouraged to engage in active participation in class discussions.

Advanced Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)		Course code	X087
	Target students Division/major/grade	/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(성204) 수A(성204)(성204)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Philip Chivers (조교수/대학 다산학부대학)			
	Office Room Number	성호관 419	Office phone Number	031-219-2831	e-mail
	Office hours	Mon 10.30-11.30, Tues 12.00-13.00, Weds 10.30 - 11.30	Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Advanced English 1 is a course for students with advanced English skills. Students must pass an interview to be granted enrollment to this class. This course concentrates on English writing and speaking with an emphasis on discussion and creative projects. Speaking lessons include pair work, small group tasks as well as class discussions, activities, and debates. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class

2. Course Objectives

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations and develop skills for conversational debate. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

(1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)

(2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)

(3)Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)

(4)Follow the steps in the writing process. (related to P07)

3. Class types and activities

Speaking lessons include pair work, small group discussions, and task-based communicative activities. Writing lessons focus on paragraph-writing skills, and include lectures, in-class writing practice and homework writing assignments.

4. Teaching Method

- | | |
|--|--|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input checked="" type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (The class will feature lectures, pair-work, group discussions, and whole-class discussions. | |

5. Support Systems in Use

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input checked="" type="checkbox"/> others (Students will use Google Sheets, Docs and Slides to | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input checked="" type="checkbox"/> others (Task Based Learning. We will use discussion groups |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.
- * We often use Google docs. Make sure that you are prepared to access Google apps.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance – 2% for 2 unexcused absences and –2% for each additional unexcused absence. 3 lates constitutes 1 absent
midterm exam		15	Mid Term Exam from units 1,2,4 & 5 plus an academic paragraph
final exam		15	Final Exam from units 8,9,11 & 12
quiz		20	Online writing quiz about questions covered in the paragraph section of the course. Academic paragraph (11–14 sentences) 10% quiz + 10% paragraph
presentation		10	1:1 Formal Speaking Test
discussion			
homework		20	Video Project (15%) Script for the video (5%)
etc		10	Daily class participation. Being active in learning and helping others learn
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 3 (3rd Edition)	Lee, C., Johannsen, Kristin.L., Chase, R.T.	National Geographic Learning, Cengage Learning	2020

10. Class system and Class shedule

<p>Competencies</p> <p>By the end of the course, students will be expected to be able to:</p> <ul style="list-style-type: none"> ?Understand the fundamentals of English grammar and punctuation. ?Engage in conversations about various topics ?Support their own opinions with facts ?Maintain a conversation by developing various topics <p>Objectives</p> <p>To achieve these competencies, students will develop skills in the categories listed below:</p> <ul style="list-style-type: none"> ?Learn vocabulary about a number of different topics ?Understand grammar to engage in topics in an advanced rhetoric ?Practice conversations about a number of different topics <ol style="list-style-type: none"> (1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly at a higher level of English. (2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities, including debates and discussions. (3)Use appropriate vocabulary and grammar to express their ideas about the topics. (4)Follow the steps in the writing process. (5)Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (6)Write using complete sentences, avoiding fragments and run-on sentences. (7)Write using capital letters, periods, commas, and other punctuation correctly.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction & Syllabus information Self-Introductions. Writing: Formatting, simple and compound sentences	E	Philip Chivers	Online		
2	Writing: Capitalisation, Topic sentences, complex sentences. Writing process, parts of a paragraph Practice paragraph	E	Philip Chivers	Online		
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5	World English: Unit 2	E	Philip Chivers	Online		
6	World English: Unit 4	E	Philip Chivers	Online		
7	World English: Unit 5	E	Philip Chivers	Online		
8	Midterm Exam	E	Philip Chivers	Online		
9	World English: Unit 8. Video Project	E	Philip Chivers	Online		
10	World English: Unit 9. Video Project	E	Philip Chivers	Online		
11	World English: Unit 9. Video Project Unit 6: Goals. Debate foundations Video Project: Topics	E	Philip Chivers	Online		
12	World English: Unit 11	E	Philip Chivers	Online		
13	Watch Videos	E	Philip Chivers	Online		
14	World English: Unit 12	E	Philip Chivers	Online		
15	Speaking Test	E	Philip Chivers	Online		
16	Final Exam	E	Philip Chivers	Online		

11. Other items of notification

1. Students are encouraged to review the class material in advance of the coming class.
2. Students are encouraged to engage in active participation in class discussions.

Advanced Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)		Course code	X088
	Target students Division/major/grade	/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(성235) 수C(성235)(성235)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Philip Chivers (조교수/대학 다산학부대학)			
	Office Room Number	성호관 419	Office phone Number	031-219-2831	e-mail
	Office hours	Mon 10.30-11.30, Tues 12.00-13.00, Weds 10.30 - 11.30	Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Advanced English 1 is a course for students with advanced English skills. Students must pass an interview to be granted enrollment to this class. This course concentrates on English writing and speaking with an emphasis on discussion and creative projects. Speaking lessons include pair work, small group tasks as well as class discussions, activities, and debates. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class

2. Course Objectives

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations and develop skills for conversational debate. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

(1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)

(2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)

(3)Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)

(4)Follow the steps in the writing process. (related to P07)

3. Class types and activities

Speaking lessons include pair work, small group discussions, and task-based communicative activities. Writing lessons focus on paragraph-writing skills, and include lectures, in-class writing practice and homework writing assignments.

4. Teaching Method

- | | |
|--|--|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input checked="" type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (The class will feature lectures, pair-work, group discussions, and whole-class discussions. | |

5. Support Systems in Use

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input checked="" type="checkbox"/> others (Students will use Google Sheets, Docs and Slides to | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input checked="" type="checkbox"/> others (Task Based Learning. We will use discussion groups |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.
- * We often use Google docs. Make sure that you are prepared to access Google apps.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance – 2% for 2 unexcused absences and –2% for each additional unexcused absence. 3 lates constitutes 1 absent
midterm exam		15	Mid Term Exam from units 1,2,4 & 5 plus an academic paragraph
final exam		15	Final Exam from units 8,9,11 & 12
quiz		20	Online writing quiz about questions covered in the paragraph section of the course. Academic paragraph (11–14 sentences) 10% quiz + 10% paragraph
presentation		10	1:1 Formal Speaking Test
discussion			
homework		20	Video Project (15%) Script for the video (5%)
etc		10	Daily class participation. Being active in learning and helping others learn
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 3 (3rd Edition)	Lee, C., Johannsen, Kristin.L., Chase, R.T.	National Geographic Learning, Cengage Learning	2020

10. Class system and Class shedule

<p>Competencies</p> <p>By the end of the course, students will be expected to be able to:</p> <ul style="list-style-type: none"> ?Understand the fundamentals of English grammar and punctuation. ?Engage in conversations about various topics ?Support their own opinions with facts ?Maintain a conversation by developing various topics <p>Objectives</p> <p>To achieve these competencies, students will develop skills in the categories listed below:</p> <ul style="list-style-type: none"> ?Learn vocabulary about a number of different topics ?Understand grammar to engage in topics in an advanced rhetoric ?Practice conversations about a number of different topics <ol style="list-style-type: none"> (1)Notice English pronunciation, intonation and stress patterns and practice speaking more clearly at a higher level of English. (2)Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities, including debates and discussions. (3)Use appropriate vocabulary and grammar to express their ideas about the topics. (4)Follow the steps in the writing process. (5)Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (6)Write using complete sentences, avoiding fragments and run-on sentences. (7)Write using capital letters, periods, commas, and other punctuation correctly.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction & Syllabus information Self-Introductions. Writing: Formatting, simple and compound sentences	E	Philip Chivers	Online		
2	Writing: Capitalisation, Topic sentences, complex sentences. Writing process, parts of a paragraph Practice paragraph	E	Philip Chivers	Online		
3	Writing: TOEFL writing process practice. Writing: Writing mechanics	E	Philip Chivers	Online		
4	World English: Unit 1	E	Philip Chivers	Online		
5	World English: Unit 2	E	Philip Chivers	Online		
6	World English: Unit 4	E	Philip Chivers	Online		
7	World English: Unit 5	E	Philip Chivers	Online		
8	Midterm Exam	E	Philip Chivers	Online		
9	World English: Unit 8. Video Project	E	Philip Chivers	Online		
10	World English: Unit 9. Video Project	E	Philip Chivers	Online		
11	World English: Unit 9. Video Project Unit 6: Goals. Debate foundations Video Project: Topics	E	Philip Chivers	Online		
12	World English: Unit 11	E	Philip Chivers	Online		
13	Watch Videos	E	Philip Chivers	Online		
14	World English: Unit 12	E	Philip Chivers	Online		
15	Speaking Test	E	Philip Chivers	Online		
16	Final Exam	E	Philip Chivers	Online		

11. Other items of notification

1. Students are encouraged to review the class material in advance of the coming class.
2. Students are encouraged to engage in active participation in class discussions.

Algorithms

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	F055
	Target students Division/major/grade	소프트웨어학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화F(팔409) 목E(팔409)(팔409)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	자료구조			
	Related basic courses	이산수학			
	Recommmended concurrent courses	인공지능			
	Related advanced courses	계산이론			
Instructor	Name (title/division)	조다정 (조교수/소프트웨어융합대학 소프트웨어학과)			
	Office Room Number	Office phone Number	2635	e-mail	
	Office hours	Homepage address			
Teaching Assistant	Name (title/division)				
	Office Room Number	Office phone Number		e-mail	

1. Introduction

This course deals with principles and techniques for design, describing and analysis of computer algorithms. The topics covered in this course are fundamental techniques used in algorithm analysis including mathematical induction, asymptotic efficiency, and several algorithm design techniques including divide-and-conquer, greedy method, dynamic programming, network flow, backtracking, string pattern matching, and NP-completeness. The course encourages students to understand fundamental scientific problems and to solve it efficiently.

2. Course Objectives

3. Class types and activities

Mostly lecture,
Focusing more on theory than implementation

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

-Prerequisite knowledge: computer programming (프로그래밍 능력), discrete mathematics (이산수학), data structures (자료구조)
-Tools: C language, Python, ability to read textbook written in English (알고리즘의 수도코드 읽을 수 있을 정도 요구됨)

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	16주차 수업 기준으로 1/4 결석을 하면 자동F
midterm exam		40%	
final exam		40%	
quiz			
presentation			
discussion			
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Introduction to Algorithms, third edition	ThomasH.Cormen, CharlesE. Leiserson, Ronald L.Rivestand CliffordStein	The MIT press	2009
Ref.	https://www.youtube.com/@ajousoftware214 8 생생강의백과: array, stack, queue list, tree, graph 강의 참고			
Ref.	아주Bb 반추학습 사이트: 선형대수(고영은) 강의 참고			

10. Class system and Class shedule

In the beginning of the course, concepts of algorithms, mathematical induction, sorting algorithms, and asymptotic analysis are taught.

The algorithm design techniques follow including divide-and-conquer, greedy approach, dynamic programming, network flow, backtracking and string pattern matching.

Then the students will learn that there are problems that do not have efficient algorithms, and how to deal with such problems.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction	K	조다정	이론강의		
2	Divide-and-Conquer	K	조다정	이론강의		
3	Divide-and-Conquer	K	조다정	이론강의		
4	Dynamic Programming	K	조다정	이론강의		
5	Dynamic Programming	K	조다정	이론강의		
6	Greedy Algorithm	K	조다정	이론강의		
7	Greedy Algorithm	K	조다정	이론강의		
8	Midterm Exam	K	조다정		지필평가	
9	Network Flow	K	조다정	이론강의		
10	Network Flow	K	조다정	이론강의		
11	Network Flow	K	조다정	이론강의		
12	Intractable Problems/NP-hard Problems	K	조다정	이론강의		
13	Intractable Problems/NP-hard Problems	K	조다정	이론강의		
14	Intractable Problems/NP-hard Problems	K	조다정	이론강의		
15	Intractable Problems/NP-hard Problems	K	조다정	이론강의		
16	Final Exam	K	조다정		지필평가	

11. Other items of notification

Algorithms

Course Name	Course type (credit/hours)	전필(3/3)		Course code	F057
	Target students Division/major/grade	소프트웨어학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화C(팔409) 금C(팔409)(팔409)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Data structure			
	Related basic courses	Discrete mathematics			
	Recommmended concurrent courses				
	Related advanced courses	Advanced algorithms, advanced data structures			
Instructor	Name (title/division)	HAMANDAWANA PRINCE (조교수/소프트웨어융합대학 소프트웨어학과)			
	Office Room Number		Office phone Number		e-mail
	Office hours	Appointment via email		Homepage address	https://dbdc.ajou.ac.kr/home
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This subject will cover the theoretical analysis of given computing problems and equip students with the ability to design and implement efficient computer algorithms.

- (1) Students will learn how to analyze algorithms that solve a problem. We will also understand the definition of asymptotic analysis accurately through simple representative algorithms, and learn and practice how to calculate it.
- (2) Basic principles learned in discrete mathematics such as mathematical induction will be used. We will learn how to accurately understand the meaning of time complexity and analyze it theoretically.
- (3) Students will further learn basic algorithm design approaches (divide and conquer, dynamic programming, greedy methods, backtracking and branch and bound) that can be applied to solve algorithmic problems, and learn the characteristics of each technique through several example problems.
- (4) Furthermore, students will learn on how to determine the the theoretical lower bounds on the time complexity of any algorithm (known or unknown) that solves a given problem. This will help students to know whether it is theoretically possible to develop better algorithms than existing ones.
- (5) Lastly, students will learn the polynomial time reduction of NP, and NP-complete problems covered in computational complexity theory.

2. Course Objectives

3. Class types and activities

The class type will be mostly lecture based with visual question and answer quizzes during classes. These random visual questions will give participation points and finally contribute to overall grade (See Method of evaluation Section).

All students should come to every class with a gadget (phone, laptop or tablet) and login to the following URL:

<https://www.classpoint.app?code=ALG0057>

We are going to use the above Classpoint URL for an interactive classroom environment. Further details on how to login will be given in the first class.

After class assignments will also be given to students as form of continuous assessment and tracking student understanding of the concepts.

*Assignments consist of exercise problems on algorithm efficiency analysis, algorithm designs, and algorithm correctness. Students are supposed to invest considerable amount of time to understand course material and to solve assignment problems.

* The assignments are individual and theory-based.

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input checked="" type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

Prerequisite knowledge: computer programming, discrete mathematics, data structures

Tools: C / C++ language, ability to read textbook written in English.

기초지식: 컴퓨터 프로그래밍, 이산수학, 자료구조

도구능력: C / C++ 언어, 영문 교재를 읽고 이해할 수 있는 능력

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	If you miss 8 classes you get an automatic F grade.
midterm exam	1	30	
final exam	1	30	
quiz		5	We are going to have many interactive in class visual activities using the provided Classpoint URL. So all students are required to participate. These interactive activities will contribute to 5% of the overall grade.
presentation			
discussion			
homework	8	25	Both theory and programming based assignments.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Foundations of algorithms, 5th Edition	Richard Neapolitan	Jones & Bartlett	2015
Sub	Introduction to the Design and Analysis of Algorithms 3rd Edition	Anany Levitin	Pearson	2011

10. Class system and Class shedule

1. We will kick start the course with basic concepts of algorithms, mathematical induction, sorting algorithms, and asymptotic analysis.
2. Next we proceed to algorithm design techniques such as divide-and-conquer, greedy approach, dynamic programming, backtracking and branch & bound.
3. We finish the course with NP-hard problems. Students will learn that there are problems that do not have efficient algorithms, and how to deal with such problems.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction: Algorithm definitions and performance Analysis –Time Complexity and Space Complexity	E	HAMANDAWAN A PRINCE	이론강의	과제	
2	Solving Problems with Divide-and-Conquer algorithm design	E	HAMANDAWAN A PRINCE	이론강의	과제	
3	Solving Problems with Divide-and-Conquer algorithm design	E	HAMANDAWAN A PRINCE	이론강의	과제	
4	Solving Problems with Dynamic Programming algorithm design	E	HAMANDAWAN A PRINCE	이론강의	과제	
5	Solving Problems with Dynamic Programming algorithm design	E	HAMANDAWAN A PRINCE	이론강의	과제	
6	Solving Problems with Greedy Algorithm design	E	HAMANDAWAN A PRINCE	이론강의	과제	
7	Solving Problems with Greedy Algorithm design	E	HAMANDAWAN A PRINCE	이론강의	과제	
8	Midterm Exam	E	HAMANDAWAN A PRINCE		시험	
9	Solving Problems with Backtracking Algorithm Design	E	HAMANDAWAN A PRINCE	이론강의	과제	
10	Solving Problems with Backtracking Algorithm Design	E	HAMANDAWAN A PRINCE	이론강의	과제	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
11	Solving Problems with Branch-and-Bound Algorithm Design	E	HAMANDAWAN A PRINCE	이론강의	과제	
12	Solving Problems with Branch-and-Bound Algorithm Design	E	HAMANDAWAN A PRINCE	이론강의	과제	
13	Lower Bounds of Sorting Problem by Comparison or Distribution	E	HAMANDAWAN A PRINCE	이론강의	과제	
14	Intractable Problems/NP-hard Problems	E	HAMANDAWAN A PRINCE	이론강의	과제	
15	Intractable Problems/NP-hard Problems	E	HAMANDAWAN A PRINCE	이론강의	과제	
16	Final Exam	E	HAMANDAWAN A PRINCE		시험	

11. Other items of notification

Applied Mechanics of Materials

Course Name	Course type (credit/hours)	전선(3/3)		Course code	B027
	Target students Division/major/grade	기계공학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화F(서135) 목E(서135)(서135)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	고체역학, 유체역학			
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	하중현 (조교수/공과대학 기계공학과)			
	Office Room Number	동관 302호	Office phone Number	2344	e-mail
	Office hours	수 (11:00-17:00)		Homepage address	softlab.ajou.ac.kr
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course aims to study the fundamental principles of solid mechanics, focusing on the basic theories of elastic and plastic deformation of solids, and to learn how to describe deformed bodies mathematically and mechanically. Through this, students will enhance their understanding of stress-strain relationships and develop the ability to analyze various mechanical behaviors of deformed bodies. Additionally, the course will cultivate problem-solving skills related to solid deformation using energy equations.

2. Course Objectives

목표

본 강의는 고체의 역학적 특징을 이해하고, 변형과 응력에 대한 물리적 및 수학적 통찰력을 함양하고자 한다. 또한, 에너지식을 이용한 고체 변형 문제 해결 능력을 배양한다.

학습성과

고체역학의 단위 시스템에 대한 이해
 고체 변형의 수학적 해석을 통한 서술 능력 강화
 다양한 탄성 및 소성 변형(1축 하중, 비틀림, 굽힘 등)에 대한 역학적 서술 방법 습득
 복잡다기한 역학적 문제의 단순화를 근간으로 한 문제 해결 능력 함양
 에너지식을 이용한 고체 변형 문제 해결 능력 배양

3. Class types and activities

In-person class (Twice a week, 75 mins)

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

고체역학, 유체역학, 기초 물리, 공학수학(미분방정식, 선형대수, 벡터연산, 등), 정역학

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	
midterm exam		40	
final exam		45	
quiz			
presentation			
discussion			
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Mechanics of Materials 3rd. Ed.	Roy R. Craig, Jr.	J. Wiley & Sons	
Sub	Mechanics of Materials, 7th Ed.	Ferdinand Beer, et al.	McGraw Hill	

10. Class system and Class shedule

수업내용은 이론학습과 연습문제풀이를 병행한다. 이론 강의를 통하여 고체역학의 기초이론과 실제응용 방법을 배운다. 수업내용의 개요는 아래와 같다.

- 수업 소개: 정역학 기초
- 응력과 변형률의 기본 관계
- 훅의 법칙 (Hookes law)
- 다양한 고체 변형에 대한 서술

본 수업은 이론 학습과 연습 문제 풀이를 병행한다. 이론 강의를 통해 고체역학의 기초 이론과 실제 응용 방법을 배운다. 수업 내용의 개요는 아래와 같습니다.

- 수업 소개: 고체역학의 기본 원리 및 심화 학습
- 응력과 변형률의 기본 관계: 응력과 변형률의 정의 및 관계식
- 초탄성 및 점탄성 물질 탐구: 이론 및 응력-변형률 관계
- 다양한 고체 변형에 대한 서술: 1축 하중, 비틀림, 굽힘 등 다양한 탄성 및 소성 변형의 역학적 서술
- 에너지식의 응용: 에너지 원리 및 에너지식을 이용한 고체 변형 문제 해결 방법

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Ch 1. Introduction to mechanics of materials	K	하종현	멀티미디어 활용 강의		
2	Ch 2. Stress and strain; Introduction to design	K	하종현	멀티미디어 활용 강의		
3	Ch 3. Axial Deformation	K	하종현	멀티미디어 활용 강의		
4	Ch 4. Torsion	K	하종현	멀티미디어 활용 강의		
5	Ch 5. Equilibrium of Beams	K	하종현	멀티미디어 활용 강의		
6	Ch 6. Stresses in Beams	K	하종현	멀티미디어 활용 강의		
7	Ch 7. Deflection of Beams	K	하종현	멀티미디어 활용 강의		
8	Midterm exam	K	하종현	중간고사		
9	Ch 8. Transformation of stress and strain; Mohrs circle	K	하종현	멀티미디어 활용 강의		
10	Ch 9. Pressure vessels, Ch 10. Buckling of columns	K	하종현	멀티미디어 활용 강의		
11	Ch 11. Energy methods	K	하종현	멀티미디어 활용 강의		
12	Ch 11. Energy methods	K	하종현	멀티미디어 활용 강의		
13	Ch 12. Special topics related to design	K	하종현	멀티미디어 활용 강의		
14	Hyperelastic materials	K	하종현	멀티미디어 활용 강의		
15	Viscoelastic materials	K	하종현	멀티미디어 활용 강의		
16	Final exam	K	하종현	기말고사		

11. Other items of notification

Artificial Intelligence

Course Name	Course type (credit/hours)	전선(3/3)	Course code	F045
	Target students Division/major/grade	소프트웨어학과/4학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(팔1025) 수C(팔1025)(팔1025)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	Machine Learning		
	Related basic courses	Linear Algebra, Probability and statistics		
	Recommmended concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)		이상훈		
	Office Room Number	팔달관1004	Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Deep learning innovations are driving breakthroughs in the field of generative AI.

Thus, the aim of this course is to introduce the recent deep learning theory and generative models.

We will study the Neural Networks including MLP, CNN, RNN, Transformers, Vision Transformers.

Then, We will learn the generative models including autoencoder, variational autoencoder, generative adversarial networks, normalizing flow, diffusion model, Neural ODE, flow matching and recent language models for generative models.

This course is composed of three parts

- (1) Part1: Deep Learning
- (2) Part2: Generative Models
- (3) Part3: Projects (Research Proposal, Final Presentation)

2. Course Objectives

3. Class types and activities

This course will be conducted as an on-site lecture.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

This course will cover some selected topics in deep learning and generative models. It will be assumed that the students have sufficient knowledge in Machine Learning and Linear Algebra.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		30	
final exam		30	
quiz			
presentation		15	
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Lecture Notes			
Etc	Papers			

10. Class system and Class shedule

<p>This course is composed of lectures, mid-term exam, final exam, and presentations.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction of Deep Learning	E	이상훈			
2	Neural Networks	E	이상훈			
3	CNN	E	이상훈			
4	RNN	E	이상훈			
5	Transformers	E	이상훈			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Vision Transformers	E	이상훈			
7	Mid-Term Exam	E	이상훈			
8	Research Proposal 1	E	이상훈			
9	Research Proposal 2	E	이상훈			
10	Generative Models 1 - AutoEncoder, Variational Autoencoder	E	이상훈			
11	Generative Models 2 - Generative Adversarial Networks	E	이상훈			
12	Generative Models 3 - Normalizing Flow	E	이상훈			
13	Generative Models 4 - Diffusion Models	E	이상훈			
14	Generative Models 5 - Neural ODE, Flow Matching, Final Presentation 1	E	이상훈			
15	Final Presentation 2	E	이상훈			
16	Final Exam	E	이상훈			

11. Other items of notification

Artificial Intelligence of Things

Course Name	Course type (credit/hours)	전선(3/3)		Course code	F033
	Target students Division/major/grade	소프트웨어학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화F(팔407) 목E(팔407)(팔407)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Computer programming, System programming and practice			
	Related basic courses	Computer Network			
	Recommmended concurrent courses	Artificial Intelligence			
	Related advanced courses	.			
Instructor	Name (title/division)	Young-Bae Ko			
	Office Room Number	Palldal 605	Office phone Number	2432	e-mail
	Office hours		Homepage address	https://sites.google.com/view/iconslab/home	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course deals with various issues about Artificial Intelligence of Things (AIoT), such as its fundamental concepts, services, and key enabling technologies.

2. Course Objectives

3. Class types and activities

Lectures and Students PT

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

본 과목의 수강을 위한 조건은 다음과 같다.

- C, 파이썬 등 코딩 능력
- 시스템프로그래밍, 컴퓨터네트워크, 인공지능에 관한 기본적인 내용 이해

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		30	
final exam			
quiz			
presentation		10	
discussion			
homework		30	
etc		5	수업참여도
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Artificial Intelligence of Things (AIoT)	Qureshi, Kashif Naseer and Newe, Thomas	CRC Press	2024
Sub	Hands-On Artificial Intelligence for IoT	Amita Kapoor	Packt	2019

10. Class system and Class shedule

지능형 사물인터넷 시스템과 서비스를 이해하고 활용할 수 있도록 전반적인 AIoT Architecture 소개부터 무선 네트워크, 서비스 등 각 구성요소 기술에 관한 학습 순서로 교육이 이루어진다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Overview	K	고영배	강의		
2	What is AIoT?	K	고영배	강의		
3	AIoT Services	K	고영배	강의		
4	IoT Components for AI/ML	K	임근우	강의		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	AI/ML Technologies for IoT	K	임근우	강의		
6	Edge Computing and Intelligence	K	고영배	강의		
7	AIoT Physical aspects	K	임근우	강의		
8	Midterm	K	고영배	지필고사		
9	Communication Technologies for AIoT	K	고영배	강의		
10	Networking Technologies for AIoT	K	임근우	강의		
11	Smart Sensing and Tracking Technologies	K	고영배	강의		
12	Project proposal	K	고영배	발표		
13	Digital Twin	K	임근우	강의		
14	Security issues	K	고영배	강의		
15	Project Final	K	고영배	발표		
16	Final exam	K	고영배	.		

11. Other items of notification

- AIoT 마이크로전공 교육과정에 포함되는 교과목임
- 해외 협력대학인 프랑스 Telecom Paris 소속 Keun-Woo Lim 교수와 공동 윤강

Basic Korean1

Course Name	Course type (credit/hours)	교선(3/3)		Course code	X027
	Target students Division/major/grade	Exchange students/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(성233) 목B(성233)(성233)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	None			
	Related basic courses				
	Recommmended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	김진후 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours	before or after class hours by appointment		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This class is for students who want to take a beginner course in Korean. In this class, we learn simple grammar expressions from Hangeul. After this semester, you will be able to say simple expressions in Korean that you use in your daily life.

2. Course Objectives

1. Students will be able to recognize basic words and expressions.
2. Students will be able to express their simple ideas using basic level of vocabulary and grammar in speaking and writing.
3. Students will be able to exchange information about familiar topics relating to themselves and their interests .
4. Students will be able to make discourse and communicate with classmates through class activities.
5. Students will be able to understand not only Korean culture but also other nations culture through social language experience during class.
6. By the end of the course, students are expected to be able to carry out basic level of communication skills and to broaden their understanding about Korean culture.

3. Class types and activities

For each lesson, learn new vocabulary, four grammar, and practice what you have learned through speaking, listening, reading and writing.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

None

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	32	15	attendance: absent(-1), lateness(-0.5), Absent 8 times = F
midterm exam	1	35	mid-term exam
final exam	1	35	final exam
quiz			
presentation			
discussion			
homework	4	10	assignments: 4 times
etc	수시	5	Class participation
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	사랑해요 한국어(I Love Korean) 1(SB)	서울대학교 언어교육원	서울대학교 출판문화원	2019
Sub	사랑해요 한국어(I Love Korean) 1(WB)	서울대학교 언어교육원	서울대학교 출판문화원	2019
Ref.	에센스 이화 한국어 1A	이화여자대학교 언어교육	Epress	2017

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	수업 소개: Orientation	E	김진후			
2	1과. 한글 배우기 (1): Learning Hangeul (1)	E	김진후			
3	2과. 한글 배우기 (2), 인사: Learning Hangeul (2), Greetings	E	김진후			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	1~2과 복습: Ch.1~2 Review	E	김진후			
5	3과. 소개: Introductions	E	김진후			
6	4과. 물건: Items and Objects	E	김진후			
7	3~4과 복습: Ch.3~4 Review	E	김진후			
8	중간시험: Midterm Exam	E	김진후			
9	5과. 음식과 주문: Food and Ordering	E	김진후			
10	6과. 일상생활: Daily Life	E	김진후			
11	7과. 쇼핑: Shopping	E	김진후			
12	5~7과 복습: Ch.5~7 Review	E	김진후			
13	8과. 시간과 날짜: Time and Date	E	김진후			
14	9과. 날씨와 생활: Weather and Life	E	김진후			
15	8~9과 복습: Ch.8~9 Review	E	김진후			
16	기말시험: Final Exam	E	김진후			

11. Other items of notification

1. 이 수업은 교환학생 대상 수업입니다. 아주대학교 유학생은 이 수업을 들을 수 없습니다. This class is for exchange students. This class is not available to international students at AJOU.
2. 교환학생 중 중급인 학생도 이 수업을 수강할 수는 있지만 추천하지 않습니다. 중급 학생이 수강하는 경우, 1~2번 한국 문화에 대한 발표를 맡게 될 수 있습니다. Intermediate students can take this class, but it is not recommended. If you are an intermediate student, you may be asked to give a presentation on Korean culture once or twice.
3. You only need to prepare the main textbook. Please refer to the reference materials when you do self-study. You dont have to buy the subtextbook(Workbook).
4. Sep 16th and Oct 3th are holidays and there are no classes. (So one makeup class will be available on video.)
5. The midterm exam is Oct 21st, and the final exam is Dec 16th. The date is subject to change, and I will make sure to announce it in the first week.

Basic Korean1

Course Name	Course type (credit/hours)	교선(3/3)		Course code	X028
	Target students Division/major/grade	/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수B(성306) 금B(성306)(성306)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	None			
	Related basic courses				
	Recommmaded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	김소현 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours	before or after class hours by appointment		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This class is for students who want to take a beginner course in Korean. In this class, we learn simple grammar expressions from Hangeul. After this semester, you will be able to say simple expressions in Korean that you use in your daily life.

2. Course Objectives

1. Students will be able to recognize basic words and expressions.
2. Students will be able to express their simple ideas using basic level of vocabulary and grammar in speaking and writing.
3. Students will be able to exchange information about familiar topics relating to themselves and their interests .
4. Students will be able to make discourse and communicate with classmates through class activities.
5. Students will be able to understand not only Korean culture but also other nations culture through social language experience during class.
6. By the end of the course, students are expected to be able to carry out basic level of communication skills and to broaden their understanding about Korean culture.

3. Class types and activities

For each lesson, learn new vocabulary, four grammar, and practice what you have learned through speaking, listening, reading and writing.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

None

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	32	15	attendance: absent(-1), lateness(-0.5), Absent 8 times = F
midterm exam	1	30	mid-term exam
final exam	1	30	final exam
quiz			
presentation			
discussion			
homework	2	20	assignments: 4 times
etc	수시	5	Class participation
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	교환학생을 위한 한국어	한글파크	한글파크	2018
Sub	사랑해요 한국어(I Love Korean) 1(SB)	서울대학교 언어교육원	서울대학교 출판문화원	2019

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	수업 소개: Orientation, 1과. 한글 배우기 (1): Learning Hangeul (1)	E	김소현			
2	2과/3과. 한글 배우기 (2): Learning Hangeul	E	김소현			
3	4과. Greeting	E	김소현			
4	5과. Place	E	김소현			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	6과. Shopping	E	김소현			
6	7과. Food	E	김소현			
7	8과. Verbs1	E	김소현			
8	중간시험: Midterm Exam	E	김소현			
9	9과. Adjectives	E	김소현			
10	10과. Goods	E	김소현			
11	11과. Family	E	김소현			
12	12과. Transportation	E	김소현			
13	13과. Verbs2	E	김소현			
14	14과. Travel	E	김소현			
15	15과. Day of the week	E	김소현			
16	기말시험: Final Exam	E	김소현			

11. Other items of notification

1. ****You only need to prepare the main textbook.**** Please refer to the reference materials when you do self-study. You dont have to buy the subtextbook(Workbook).
2. May 6th and June 6th are holidays and there are no classes. (So one makeup class will be available on video.)
3. The midterm exam is April 25, and the final exam is June 20. The date is subject to change, and I will make sure to announce it in the first week.

Basic Korean1

Course Name	Course type (credit/hours)	교선(3/3)		Course code	X029
	Target students Division/major/grade	Exchange students/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수B(다109) 금B(다109)(다109)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	None			
	Related basic courses	None			
	Recommanded concurrent courses	Basic Korean 2			
	Related advanced courses	Korean course 1			
Instructor	Name (title/division)	정미혜 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours	Before or after class hours		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course is designed for foreign students who have no or little background of Korean language. This sixteen-week course intends to help students master Hangeul, Korean alphabets and accomplish beginning level of proficiency in Korean language with the topics occurring in a daily conversation. Students are also expected to raise their understanding of Korean culture expanding their language experiences in the class.

2. Course Objectives

3. Class types and activities

1. Lecture type: Mixed with lecture, asking and answering, pair work and team activities.
2. Class procedure: Dictation–Lecture–Speaking and Listening Practice–Individual or team presentation
3. Class Material: Everyday lesson will be delivered with PPT and worksheets from the main textbook.
4. Self Practice: After each lesson, students will review the lesson completing the worksheets which will be given to the students as homework assignment.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

None

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	32	15	Attendance. 1 point reduction whenever 1 day absent. Students must attend 1/4 of total class hours to receive an official grade.
midterm exam	1	25	Written test
final exam	1	30	Oral test(Interview type)
quiz	3	15	Dictation and quiz
presentation			
discussion			
homework	8-10	10	Submitting the worksheet of each lesson
etc		5	Class participation
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	교환 학생을 위한 기초 한국어(Basic Korean for exchange students)	박수연 외	한글파크	2021

10. Class system and Class shedule

-1st Session(1st week to the 4th week): Mastering Hangeul, Korean alphabets focusing on connecting the sound of each letter and its form. Reading and writing simple words and expressions.

-2nd Session(5th week to end): Learning and improving basic communication skills with daily topics focusing on listening, speaking, reading, and writing

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Orientation	E	정미혜	Lecture		
2	Lesson 1. Hangeul 1	E	정미혜			
3	Lesson 2. Hangeul 2	E	정미혜		Dictation	
4	Lesson 3. Hangeul 3	E	정미혜		Dictation & reading	
5	Review and summary of Hangeul	E	정미혜		Quiz	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Lesson 4. Self-Introduction	E	정미혜			
7	Lesson 5. Telling the place you are going to.	E	정미혜			
8	Mid-term exam	E	정미혜		Written exam	
9	Lesson 6. How much is it?	E	정미혜			
10	Lesson 7. Ordering food	E	정미혜		Vocabulary quiz	
11	Lesson 8. Asking what people like	E	정미혜			
12	Lesson 9. Korean is fun	E	정미혜			
13	Lesson 10. Asking for the location	E	정미혜		Vocabulary quiz	
14	Lesson 11. Negation form	E	정미혜			
15	Lesson 12. Directions	E	정미혜			
16	Final Exam	E	정미혜		Oral test	

11. Other items of notification

Basic Korean2

Course Name	Course type (credit/hours)	교선(3/3)		Course code	X025
	Target students Division/major/grade	/		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(울258) 수E(울258)(울258)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	한국어1			
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	오현주 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours	수업 전, 후		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

It is a liberal arts Korean subject for foreign exchange students who have taken Korean 1, can read Korean, and can communicate basic. In addition, this class is related to our university's communication skills, creativity, thinking skills, and openness capabilities.

2. Course Objectives

1. 한국어의 주요 문법인 형용사, 시제, 부정문, 최상급 등을 체계적으로 연습하여 한국어능력을 향상시킨다.
2. 한국 음식, 여행, 물건 사기 등 일상 생활의 의사소통에 관한 기본 어휘를 학습한다.
3. '듣기'와 '읽기' 훈련을 통하여 한국어를 이해 영역과 '말하기'와 '쓰기' 훈련을 통하여 한국어의 표현 능력을 향상시킨다.
4. 일상 생활에서 일어날 수 있는 한국 문화를 학습의 주제와 관련하여 이해한다.

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input checked="" type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

한국어1을 수강했거나, 한글의 자음과 모음을 습득하고 기초적인 의사소통이 가능한 한국어 초급자를 위한 수업이다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		20%	
midterm exam	1회	25%	
final exam	1회	25%	
quiz	1회	15	
presentation	1회	15%	
discussion			
homework			
etc			
study hours	매일 30분씩 주당 3시간 이상		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	New Easy Korean 1B	New Easy Academy	한글파크	2021

10. Class system and Class shedule

수업은 그날 배운 내용은 모두 습득하도록 하고, 과제물을 통하여 충분히 연습한다. 그리고 다음 시간에 반드시 복습을 통하여 확인한다.
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	수업소개	K/E	오현주	대면		
2	기초 문법 복습	K/E	오현주	대면		
3	1과 총무로역에 내려서 3호선으로 갈아타요.	K/E	오현주	대면		
4	2과 스키를 탈 수 있어요. 하지만 잘못 타요.	K/E	오현주	대면		
5	3과 비싸서 하나만 샀어요.	K/E	오현주	대면		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	4과 혼자 텔레비전 보고 있어요.	K/E	오현주	대면	퀴즈	
7	복습	K/E	오현주	대면		
8	중간고사	K/E	오현주	대면	지필시험	
9	5과 매우니까 냉면 시키지 말고 다른 거 시키세요.	K/E	오현주	대면		
10	6과 12시나 1시쯤 만날까요?, 퀴즈	K/E	오현주	대면		
11	발표 1	K/E	오현주	대면	발표하기	ppt준비
12	6과, 7과	K/E	오현주	대면		
13	7과 제가 내일 가져다줄게요	K/E	오현주	대면		
14	8과 어머니 생신 선물을 사셨어요?	K	오현주	대면		
15	복습	K	오현주	대면		
16	기말고사	K	오현주	대면	지필시험	

11. Other items of notification

주별 강의 내용 및 일정 등은 다소 변동이 있을 수 있습니다.

Basic Korean2

Course Name	Course type (credit/hours)	교선(3/3)	Course code	X026
	Target students Division/major/grade	/	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(성234) 수E(성234)(성234)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	한국어1		
	Related basic courses			
	Recommmaded concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)	고유림 (강사/대학 다산학부대학)		
	Office Room Number	Office phone Number	e-mail	
	Office hours	수업 전, 후	Homepage address	
Teaching Assistant	Name (title/division)			
	Office Room Number	Office phone Number	e-mail	

1. Introduction

2. Course Objectives

1. 한국어의 주요 문법인 형용사, 시제, 부정문, 최상급 등을 체계적으로 연습하여 한국어능력을 향상시킨다.
2. 한국 음식, 여행, 물건 사기 등 일상 생활의 의사소통에 관한 기본 어휘를 학습한다.
3. ''듣기''와 ''읽기'' 훈련을 통하여 한국어를 이해 영역과 ''말하기''와 ''쓰기'' 훈련을 통하여 한국어의 표현 능력을 향상시킨다.
4. 일상 생활에서 일어날 수 있는 한국 문화를 학습의 주제와 관련하여 이해한다.

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

한국어1을 수강했거나, 한글의 자음과 모음을 습득하고 기초적인 의사소통이 가능한 한국어 초급자를 위한 수업이다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		20	Attendance. 1 point reduction whenever 1 day absent. students must attend 1/4 of total class hours to receive an official grade.
midterm exam	1회	25	Written test
final exam	1회	25	Written test
quiz	1회	15	Dictation and quiz
presentation	1회	15	Presentation
discussion			
homework			
etc			
study hours	매일 30분씩 주당 3시간 이상		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	New Easy Korean 1B	New Easy Academy	한글파크	2024

10. Class system and Class shedule

수업은 그날 배운 내용은 모두 습득하도록 하고, 과제물을 통하여 충분히 연습한다. 그리고 다음 시간에 반드시 복습을 통하여 확인한다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	수업소개	K/E	고유림	대면		
2	기초 문법 복습	K/E	고유림	대면		
3	1과 총무로역에 내려서 3호선으로 갈아타요.	K/E	고유림	대면		
4	2과 스키를 탈 수 있어요. 하지만 잘못 타요.	K/E	고유림	대면		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	3과 비싸서 하나만 샀어요.	K/E	고유림	대면		
6	4과 혼자 텔레비전 보고 있어요.	K/E	고유림	대면	어휘 퀴즈	
7	복습	K/E	고유림	대면		
8	중간고사	K/E	고유림	대면	지필시험	
9	5과 매우니까 냉면 시키지 말고 다른 거 시키세요.	K/E	고유림	대면		
10	6과 12시나 1시쯤 만날까요?, 퀴즈	K/E	고유림	대면		
11	발표 1	K/E	고유림	대면	발표하기	PPT준비
12	발표 2	C	고유림	대면	발표하기	PPT준비
13	7과 제가 내일 가져다줄게요	K/E	고유림	대면		
14	8과 어머니 생신 선물을 사셨어요?	K/E	고유림	대면		
15	복습	K/E	고유림	대면		
16	기말고사	K/E	고유림	대면	지필시험	

11. Other items of notification

주별 강의 내용 및 일정 등은 다소 변동이 있을 수 있습니다.

Bioinformatics

Course Name	Course type (credit/hours)	전필(3/3)		Course code	G080
	Target students Division/major/grade	생명과학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화D(원540) 목C(원540)(원540)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	대화형프로그래밍, 세포생물학			
	Related basic courses	생물학, 통계 및 프로그래밍 관련 기타 과목			
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	박지환 (조교수/자연과학대학 생명과학과)			
	Office Room Number	팔달관 712호	Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course is an introductory bioinformatics, focusing on key concepts and computational practices for studying genomics. During the first half of the course, we will learn about the qualitative features of genomics data and the relevant computational analysis and techniques, including MATLAB programming. During the second half, we will study the quantitative features of genomics data generated by next-generation sequencing (NGS) as well as differential gene expression analysis. This course aims to explore and learn the fundamentals of genomics analysis, commonly used in modern biology. To this end, we will use MATLAB for data analysis, which includes many convenient toolboxes and built-in functions, for understanding the key concepts of bioinformatics, rather than studying programming or detailed algorithms.

2. Course Objectives

- 교육목표

생명공학을 전공하는 학생들에게 생물학적 데이터가 주어졌을 때 정량적으로 접근하여 문제점을 해결 하고, 다양한 오픈 소프트웨어를 사용하여 데이터를 분석하고 결과를 해석할 수 있는 능력을 키우는 것을 목표로 한다.

- 학습성과

바이오인포매틱스 알고리즘의 이론적 배경을 이해한다.

연구 목적에 맞는 바이오인포매틱스 연구를 디자인하고, 데이터 종류에 맞는 분석을 전략을 수립한다.

정량적 데이터 분석 결과의 의미를 해석하고 이해한다

실형으로 생산된 데이터들을 다양한 바이오인포매틱스 분석 도구를 이용하여 분석한다.

3. Class types and activities

1. Every week, on either Tuesday or Thursday, we will have a quiz related to theory or computational practice during class.
2. The midterm and final exams will be taken in the classroom on campus. The final exam may be replaced with a team project-based presentation, depending on the course schedule.
3. Each students participation will be evaluated based on the number of questions they ask during the lecture.
4. I highly recommend that students review the materials from the previous lecture. The relevant pages in the textbook will be indicated in the lecture slides.
5. In the first half of the semester, students will have assignments, such as completing MATLAB online tutorials, to acquire basic MATLAB programming skills.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- 기초 생물학 및 세포생물학에 대한 이해
- MATLAB 설치 및 컴퓨터 프로그래밍의 필요성에 대한 이해

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	10점 만점에서 1회 결석마다 1점씩 감점처리함. 대리 출석 적발시 0점 처리함 (참고: 8회 이상 결석 및 상습적 대리출석의 경우 F 처리함). 지각 3회면 결석 1회로 처리함. 수업 중 15분 이상 무단 자리가탈은 지각과 동일하게 처리함.
midterm exam		30	대면 고사
final exam		30	대면 고사 혹은 팀 프로젝트
quiz		20	(1) 지난 이론 수업에 대한 퀴즈 혹은 (2) 수업 전 혹은 수업 동안 실시간으로 프로그래밍을 하여 제출하는 과제. 수업 복습 및 실습을 직접 수행했으면 어렵지 않게 풀 수 있는 문제로 구성됨. 총 점수는 모든 퀴즈/과제의 평균으로 계산
presentation			
discussion			
homework			
etc		10	이론 강의 시 질의 횟수 등을 평가. 수업 당 최대 2회 가능하며, 질의 1회 당 1점씩 점수 부여
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Introduction to Bioinformatics 2/e – inter (5E XE P)	Arthur Lesk	OXFORD	2020
Sub	Bioinformatics: A Practical Guide to the Analysis of Genes and Proteins 4/E	Andreas D. Baxevanis	Wiley	2020

10. Class system and Class shedule

<ol style="list-style-type: none"> 1. 바이오인포매틱스 및 유전체 기본 개념 및 배경 소개 2. MATLAB programming에 대한 이해 및 분석 실습 3. 유전체 데이터의 정성적/정량적 분석법 및 관련 데이터베이스의 이해
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction	E	박지환	이론 강의		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	From genetics to genomes	E	박지환	이론 강의		
3	The panorama of life	E	박지환	이론 강의		
4	Basic Programming	E	박지환	이론 강의+실습		
5	Alignments and phylogenetic trees	E	박지환	이론 강의		
6	Biological databases (including nucleotide sequence and publication databases)	E	박지환	이론 강의+실습		
7	Next-generation sequencing	E	박지환	이론 강의		
8	Midterm exam	E	박지환			
9	Statistical methods for biologists	E	박지환	이론 강의		
10	Transcriptomics	E	박지환	이론 강의		
11	Transcriptomics	E	박지환	이론 강의+실습		
12	Functional enrichment analysis	E	박지환	이론 강의+실습		
13	Network analysis	E	박지환	이론 강의+실습		
14	Artificial intelligence and machine learning	E	박지환	이론 강의+실습		
15	Artificial intelligence and machine learning	E	박지환	이론 강의+실습		
16	Final exam	E	박지환			

11. Other items of notification

Biological Fluid Mechanics

Course Name	Course type (credit/hours)	전선(3/3)		Course code	B040
	Target students Division/major/grade	기계공학과/4학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화D(서107) 목C(서107)(서107)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Fluid mechanics, Solid mechanics			
	Related basic courses	Physics, Fluid mechanics, Solid mechanics			
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	하중현 (조교수/공과대학 기계공학과)			
	Office Room Number	동관 302호	Office phone Number	2344	e-mail
	Office hours	Thu. 14:00-16:00		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course explores various biomechanical phenomena found in nature using the principles of fluid and solid mechanics learned in foundational coursework. Initially, we revisit fundamental concepts in fluid and solid mechanics, focusing on enhancing our physical understanding of fluid-solid interactions occurring in biological entities. Furthermore, we study how various natural phenomena – including animal movements, plant transformations, biomimicry, and the respiratory and circulatory systems in humans – can be explained by mechanical principles.

2. Course Objectives

Goals:

- To understand the physical principles behind fluid-solid interactions in biological entities.
- To apply mechanical principles to explain various natural phenomena.
- To foster critical thinking skills by applying theoretical knowledge to real-world phenomena.

Achievements:

- Acquired a robust understanding of fluid and solid mechanics and their implications in biological entities.
- Gained a deep insight into the physics of fluid-solid interactions in nature.
- Successfully applied mechanical principles to explain various natural phenomena.
- Demonstrated critical thinking skills by linking theoretical knowledge to observable natural phenomena.
- Contributed to a broader understanding of how physics can be utilized to explain and mimic complex biological processes.

3. Class types and activities

In-person class (Twice a week, 75 mins)

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Fundamental physics, Fluid mechanics, Solid mechanics, Engineering mathematics

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	결석 1회 -1점, 지각 1회 -0.5점, 출석이 심히 불량할 경우 추가적인 페널티가 있을 수 있음 (결석 2회까지 면제)
midterm exam	1	45	
final exam			
quiz			
presentation	1	40	
discussion			
homework	약 1-2회	10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	Fluid Mechanics (Fundamentals and Applications), any edition	Cengel & Cimbala	McGraw-Hill	
Sub	Mechanics of Materials 3rd. Ed.	Roy R. Craig, Jr.	J. Wiley & Sons	
Sub	Capillarity and wetting phenomena: drops, bubbles, pearls, waves	Gennes, Pierre-Gilles, Françoise Brochard-Wyart, and David Quéré	Springer New York	

10. Class system and Class shedule

This class primarily focuses on the fundamental principles of biological fluid mechanics, including solid mechanics, and their applications to practical problems. The main contents of the course are as follows:

- Fundamental mechanics
- Scaling and dimensional analysis
- Interfacial physics
- Locomotion of organism
- Botanical movements
- Respiratory and circulatory system
- Biomimetics

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction	K	하종현	멀티미디어 활용 강의		
2	Fundamentals: Fluid mechanics	E	하종현	멀티미디어 활용 강의		
3	Fundamentals: Solid mechanics	E	하종현	멀티미디어 활용 강의		
4	Fluid-structure interaction	E	하종현	멀티미디어 활용 강의		
5	Fluid-structure interaction	E	하종현	멀티미디어 활용 강의		
6	Interfacial locomotion	E	하종현	멀티미디어 활용 강의		
7	Botanical movement	E	하종현	멀티미디어 활용 강의		
8	MIDTERM EXAM	E	하종현	중간고사		
9	Botanical movement	E	하종현	멀티미디어 활용 강의		
10	Plant physiology	E	하종현	멀티미디어 활용 강의		
11	Flying	E	하종현	멀티미디어 활용 강의		
12	Swimming	E	하종현	멀티미디어 활용 강의		
13	Blood	E	하종현	멀티미디어 활용 강의		
14	Respiratory system	E	하종현	멀티미디어 활용 강의		
15	Review	K	하종현	멀티미디어 활용 강의		
16	Term project	K	하종현	기말고사		

11. Other items of notification

Business Statistics and Data Analysis

Course Name	Course type (credit/hours)	교필(3/3)			Course code	1007
	Target students Division/major/grade	경영학과/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(다111) 수A(다111)(다111)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김진학 (조교수/경영대학 경영학과)				
	Office Room Number	다산관 319-2호	Office phone Number	2723	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Statistical concepts employed in the solution of managerial problems are discussed. Topics include descriptive statistics, frequency distributions, laws of probability, probability models, sampling distributions, statistical inference, regression and correlation analysis and introduction to multiple regression models and one-way analysis of variance.

2. Course Objectives

이 과목은 기업 경영 문제를 직접 해결하는 데 사용되는 기본적인 통계적 방법과 더욱 고급 분석 방법의 기반으로 사용되는 방법에 대한 소개이다. 이는 경영 전공 과정의 공통 지식 요구 사항 중 양적 방법 요구 사항을 충족시킵니다.

3. Class types and activities

The classes are structured with lectures, discussions, and exercises. The course topics are initially presented through lectures, supported by audiovisual materials when necessary, to enhance comprehension of the lecture content. In order to foster discovery-based learning, the traditional one-sided lecture format is minimized, and discussions are employed to extract the key concepts from the lectures. These discussions occur in both one-to-many formats between the professor and students, as well as in small-group settings among students. For topics involving calculations and computer usage, supplementary handouts are provided to aid students in understanding the content. Creating an environment where students feel comfortable asking questions and engaging in dialogue is one of the objectives, with the aim of maximizing their understanding of the course material. All course-related materials are distributed through Ajour Bb.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

이 과목에 필요한 선수과목은 없다. 그러나 고등학교 수준의 대수와 미적분의 지식을 가정합니다. 또한 Microsoft Excel과 같은 스프레드시트 사용에 대한 기본 지식을 요구합니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam	1	30	
final exam	1	40	
quiz	15	30	
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Statistics for Management and Economics 11e	Gerald Keller	Cengage Learning	2018

10. Class system and Class shedule

통계적 분석의 핵심이 되는 가설 검정을 다루기 위해서는 그 근간이 되는 확률과 확률 분포에 대한 이해가 필수적이다. 따라서 이 과목의 전반부에는 이러한 이론적인 토대를 마련한다. 이를 바탕으로 이 과목의 후반부에서는 통계적 추론과 회귀분석 등 심도있게 다룬다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to Statistics, Descriptive Statistics, Plots	E	김진학	Lecture		
2	Basics of Excel, Probability Theory	E	김진학	Lecture		
3	Probability Theory	E	김진학	Lecture		
4	Random Variables, Probability Models	E	김진학	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Discrete and Continuous Distributions	E	김진학	Lecture		
6	Sampling Distributions, Simulation, Central Limit Theorem	E	김진학	Lecture		
7	Midterm Exam	E	김진학	Test		
8	Point and Interval Estimation	E	김진학	Lecture		
9	Statistical Inference: Single population	E	김진학	Lecture		
10	Statistical Inference: Two population, pairs samples, Chi-Square tests	E	김진학	Lecture		
11	Simple Regression and Correlation, Ordinary Least Squares, Sampling Variability	E	김진학	Lecture		
12	Multiple Regression	E	김진학	Lecture		
13	Multiple Regression Models, Dummy Variables, Analysis of Variance by Regression	E	김진학	Lecture		
14	Business Ethics	E	김진학	Lecture		
15	Review	E	김진학	Lecture		
16	Final Exam	E	김진학	Test		

11. Other items of notification

Chinese society and culture

Course Name	Course type (credit/hours)	전선(3/3)			Course code	Z013
	Target students Division/major/grade	Division of International Studies (국제학부)/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월F(울259) 목F(울259)(울259)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses	중국입문, 중국근현대사				
	Recommended concurrent courses	중국사상과 예술(1학기)				
	Related advanced courses					
Instructor	Name (title/division)	이병호 (부교수/사회과학대학 사회학과)				
	Office Room Number	울곡관408	Office phone Number	2745	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course is to understand Chinese society and culture by employing a data analytic approach. This course summarizes some of the new directions during the last two decades in Chinese social science produced by the construction and analysis of different kinds of large historical and contemporary data sets, and organizes this knowledge in a framework which both encourages learning about China in comparative perspective, and differentiates knowing and thinking, i.e. facts from theory and values.

This course eschews the standard chronological narrative arc for an analytic approach that focuses on specific data sets and distinguishes between objectivities, which deal largely with data measurement and the production of new facts, and subjectivities, which deal largely with how these new facts complicate our understanding of social theories from the representation and categorization of human behavior, to the interpretation of human motivation, and the construction of individual and group identities.

The course also surveys the post-1949 Chinese society, focusing on social changes since 1978. It explores the basic institutional make-up of Chinese society, the structural changes brought forth in the reform era, and how these institutions configure the social life in contemporary China.

2. Course Objectives

The primary goals of this course are to teach students how to think critically about recent advances in social research on China, how to use such research to better inform public policy in China, and how to express their thoughts clearly in writing and group discussions. This class also focuses on improvement of basic quantitative skills as we examine major findings from big social scientific datasets.

By the end of the course, you should be able to

- Demonstrate an informed understanding of the social issues, changes, problems and developments in contemporary China
- Analyze and interpret the significance of such social issues and changes in the light of sociological concepts, debates, and perspectives

3. Class types and activities

- ? The main format of this class will be that of lectures and discussions.
- ? Course syllabus and course schedule are subject to change at the discretion of the instructor.
- ? It is essential that students 1) do the assigned readings before coming to class, 2) think critically about the readings, and 3) actively participate in classroom discussions.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

강의자료 및 읽기자료는 기본적으로 영어로 제공될 것이기에 중국어 또는 한자에 대한 기본적 지식이 있으면 좋지만 그것이 필수적인 도구능력은 아님.

<중국어>, <중국입문>, <중국근현대사> 등의 과목을 통해 습득한 중국사회와 문화에 대한 기초지식.

In principle, all the lecture notes and required reading materials will be provided in English.
Hence, it is feasible to take this course WITHOUT having prior knowledge of Putonghua or Chinese characters.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	Allowing two unexcused absences without deduction; Eight or more unexcused absences will FAIL this course
midterm exam		45	In-class midterm exam
final exam	1	45	The specific guidelines will be announced prior to final exam
quiz			
presentation			
discussion		5	Class participation via Q&A or discussion [수업태도 및 수업참여: 교수의 질문에 대한 자발적 참여, 강의내용 관련 질문 등]
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	One Quarter of Humanity [한국어 번역: 인류사분의 일]	James Z. Lee & Wang Feng	Harvard University Press [성균관대출판부]	1999[2012]
Ref.	Governance and Politics of China (The Third Edition)	Tony Saich	Palgrave Macmillan	2011
Ref.	The Religion of China: Confucianism and Taoism [한국어 번역: 유교와 도교]	Max Weber	Free Press [문예출판사]	1964[1990]

10. Class system and Class shedule

No textbook will be used.

Reading materials, mostly written in English, will be distributed in class, or via internet, downloadable from our course Blackboard site.

FYI, some course readings such as Lee and Wang (1999) were translated in Korean.

Tentative Course Outline

- Part One: Inequality, Social Mobility, and Social Development in China
- Part Two: Population Dynamics in China: A Long-term Perspective
- Part Three: Social Relations in China: Marriage and Family
- Part Four: Chinese Nation and Ethnicity

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Organizational Meeting and Conceptual Discussion	K/E	이병호			
2	Categories and Boundaries: Understanding Chinese Patterns of Inequality	K/E	이병호			
3	Education and Social Mobility in Late Imperial China	K/E	이병호			
4	Education and Social Mobility in Contemporary China	K/E	이병호			
5	Wealth and Income Inequality in Late Imperial China	K/E	이병호			
6	Wealth and Income Inequality in Contemporary China	K/E	이병호			
7	Inequality and Social Unrest: Myth and Reality	K/E	이병호			
8	Midterm Exam	K/E	이병호			
9	One Quarter of Humanity: Chinese Population	K/E	이병호			
10	Chinese Demographic Transition: Past and Present	K/E	이병호			
11	China's Population Policy and Floating Population	K/E	이병호			
12	Private Life in China 1: Love and Intimacy	K/E	이병호			
13	Private Life in China 2: Marriage and Family	K/E	이병호			
14	Ethnicity and Nationalism and/or Law and Ethnicity in China	K/E	이병호			
15	Chinese Identity: The Construction of Individual and Group Identities	K/E	이병호			
16	Final Exam	K/E	이병호			

11. Other items of notification

Important Course Policies:

- ACADEMIC DISHONESTY: Any student determined to have engaged in any form of academic dishonesty including plagiarism, cheating, and attendance forgery will receive a failing grade in the course.

- I strongly recommend that questions about lectures or course materials should be asked during our class meetings.

- I cannot always respond your email messages right away, so contact me before or after class, or make an appointment with me if you have an important issue.

- 강사 및 조교와의 연락은 상담시간 또는 이메일을 통해서 한다. 이메일을 이용할 경우 제목에 [중국사회와 문화]를 ***반드시*** 포함하도록 한다.

- 행정사안(취업계, 공결, 출결, 시험 등)에 대한 질의는 ***반드시*** 조교에게 이메일로 한다. 조교를 건너뛰고 질의할 경우 답변하지 않는 것을 원칙으로 한다.

- 다만 강사에게만 알리고자 하는 중대한 사안이 발생할 경우 조교가 아닌 강사에게 직접 연락한다.

Comparing Novels with Films

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X474
	Target students Division/major/grade	/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(다B105) 수E(다B105)(다B105)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Joseph Ball (조교수/대학 다산학부대학)				
	Office Room Number	성호관421호	Office phone Number	2846	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course concentrates on comparing novels with films. Lessons will include pair work, group tasks, and class discussions about the text. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- 1) Students will gain confidence and improve their understanding of novels by reading
- 2) Students will watch films and compare them to the novels.
- 3) Students will make their their own short films.
This includes: writing and practicing dialogs to make a video, performing in their own film, and giving criticism about the performances.
- 4) Students will also learn to critique the texts with specific reasons, details, and examples.

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by writing expressions and a dialog. Students will also learn to produce a film by writing it and then recording it. Lessons will include models for developing and supporting their main ideas for the film.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		15%	
midterm exam		20%	Midterm Only
final exam			
quiz			
presentation		15%	
discussion			
homework		25%	Group Written Script
etc		25%	Group Film
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	Harry Potter and the Sorcerer's Stone	J. K. Rowling	Scholastic Inc. Arthur A. Levine Books	1997
	Harry Potter and the Chamber of Secrets	J. K. Rowling	Scholastic Inc. Scholastic and the Lantern Design,	1999

10. Class system and Class shedule

<p>We will follow the syllabus and of course the order of the novels.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Review of Syllabus Read Harry Potter and the Chamber of Secrets: Pages 1-11, 12-23, 24-41 Daily Discussion	K	Joseph Ball	Online & Video		
2	Read: Harry Potter and the Soceror's Stone: Pages 42-64, 65-85 Daily Discussion	K	Joseph Ball	Online & Video		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Read: Harry Potter and the: Pages 86-103, 104-121 Daily Discussion	K	Joseph Ball	Online & Video		
4	Read: Harry Potter and the SS: Pages 122-139, 140-160 Daily Discussion	K	Joseph Ball	Online & Video		
5	Read: Harry Potter and the SS: Pages 161-181, 182-204, 205-226 Daily Discussion 추석 Holiday No Class 9/30	K	Joseph Ball	Online & Video		
6	Read: Harry Potter and the Chamber of Secrets: Pages 227-248, 249-264, 265-282 Daily Discussion Watch Movie for Video Class	K	Joseph Ball	Online & Video		
7	Review for Midterm Exam Read: Harry Potter and the Chamber of Secrets: Pages 283-305, 306-326, 327-341 Daily Discussion Watch Movie for Video Class	K	Joseph Ball	Online & Video		
8	Mid-term Exam 20% Read Harry Potter and the Sorcerer's Stone: Pages 1-17, 18-30, 31-45	K	Joseph Ball	Online & Video		
9	Review Guidelines for Writing the Script Read Harry Potter and the Sorcerer's Stone: Pages 46-60, 61-87, 88-112 Daily Discussion	K	Joseph Ball	Online & Video		
10	Review Guidelines for Performing in the Film Read Harry Potter and the Sorcerer's Stone: Pages 113-130, 131-142, 143-162 Daily Discussion	K	Joseph Ball	Online & Video		
11	Review for Shooting the Film Read Harry Potter and the Sorcerer's Stone: Pages 163-179, 180-193, 194-214 Daily Discussion	K	Joseph Ball	Online & Video		
12	Read Harry Potter and the Sorcerer's Stone: Pages 215-227, 228-241, 242-261 Daily Discussion Watch Movie for Video Class	K	Joseph Ball	Online & Video		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
13	Written Scripts for Films Due 25% Read Harry Potter and the Sorcerer's Stone:Pages 262-287, 288-309 Daily Discussion Watch Movie for Video Class	K	Joseph Ball	Online & Video		
14	Final Review for Group Films Watch Movie for Video Class	K	Joseph Ball	Online & Video		
15	Group Films 25%	K	Joseph Ball	Online & Video		
16	Group Films 25%	K	Joseph Ball	Online & Video		

11. Other items of notification

Computer Programming

Course Name	Course type (credit/hours)	교필(3/3)			Course code	E003
	Target students Division/major/grade	교통시스템공학과/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(팔 1020) 목D(팔 1020)(팔 1020)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses	교통수요예측프로젝트, 모빌리티데이터분석				
Instructor	Name (title/division)	김의진 (조교수/공과대학 교통시스템공학과)				
	Office Room Number	산학협력원 823호	Office phone Number	2402	e-mail	
	Office hours	An hour after class		Homepage address	https://sites.google.com/view/euijinkim	
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

The Computer Programming course aims to teach the Python language most widely used for data analysis from scratch. This course is designed for beginners who do not know Python, and it deals with installation, environment setting, basic Python grammar, and major packages for data analysis. This course only considers Python grammar as much as the data analysts need and put more effort into the various practice for data analysis. By doing so, the students can naturally become familiar with Python and data analysis. Furthermore, this course teaches how to use ChatGPT and Google to solve the programming problem by themselves. Promoting interest in Python programming, in particular, by experiencing the entire data analysis process, is one of the main objectives of this lecture. This course can be used universally in engineering dealing with data analysis, and a basic understanding of programming learned through Python can be easily extended to other languages.

2. Course Objectives

3. Class types and activities

This course is conducted by learning only the minimum level of the basic programming principles and Python grammar, then entering the data analysis example and learning the necessary functions at that time. The students will experience the entire data analysis process while performing several programming and data analysis assignments and also will have their own analytical project experience. This allows the students to learn programming with a clearer sense of purpose by directly feeling what purpose and needs Python is used for, rather than learning the boring Python grammar and functions.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Statistics, documentation (Word), mathematics, and calculation (Excel)

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam			
final exam			
quiz			
presentation		20	In-Class Exercise Session
discussion			
homework	2	30	Programming Assignments
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Do it! Python Data Analysis	김영우	이지스퍼블리싱	2022
Ref.	An Introduction to Statistical Learning with Python (https://www.statlearning.com/)	Gareth James; Daniela Witten; Trevor Hastie; Rob Tibshirani; Jonathan Taylor	Springer	2023

10. Class system and Class shedule

본 수업은 수업의 목표에 따라 Python 환경 설정, Python 기초 원리 및 문법, 데이터 분석 예제를 통한 데이터 분석 관련 패키지 및 함수 학습, 자기주도적 데이터 분석 관련 문제 해결 방법의 순서로 교육을 진행할 예정입니다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Syllabus / Introduction of Python	E	김의진	이론 수업		
2	Environment Setting / ChatGPT	E	김의진	실습 수업		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Python Grammar	E	김의진	실습 수업		
4	Python Grammar	E	김의진	실습 수업		
5	Python Grammar	E	김의진	실습 수업		
6	Data Preprocessing (I)	E	김의진	실습 수업		
7	Data Preprocessing (II)	E	김의진	실습 수업		
8	Data Analysis Report (Mid-term)	E	김의진	실습 수업		
9	Basic Data Analysis (I)	E	김의진	실습 수업		
10	Basic Data Analysis (II)	E	김의진	실습 수업		
11	Statistical Analysis (I)	E	김의진	실습 수업		
12	Statistical Analysis (II)	E	김의진	실습 수업		
13	Prediction	E	김의진	토의/토론 수업		
14	Data Analysis Project	E	김의진	토의/토론 수업		
15	Lecture Review	E	김의진	토의/토론 수업		
16	Data Analysis Report (Final)	E	김의진	이론 수업		

11. Other items of notification

Computer Programming and Practice

Course Name	Course type (credit/hours)	전필(4/5)		Course code	F020
	Target students Division/major/grade	소프트웨어학과/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월 16:30~18:00 (팔409) 수5(팔333) 수6(팔333) 목 16:30~18:00 (팔409)(팔333, 팔409)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommanded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Yared Zerihun Bekele			
	Office Room Number		Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course introduces students to the fundamentals of computer programming. The contents include software life cycle, techniques for program design and development, data structures, and the constructs of the C programming language.

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

- Understand SDLC and the concept of programming
- Have an understanding of algorithms
- Understand the syntax and semantics of constructs of the C language.
- Write whole programs by dividing large problems into smaller parts

2. Course Objectives

<교육목표>

학생들로 하여금 작은 규모의 문제를 분석하여 필요한 요구사항을 도출하고, 이를 바탕으로 설계/구현할 수 있는 능력을 갖추게 한다.

<교과목 학습성과>

1. C 언어의 문법적 구조 및 의미를 이해한다.
2. 주어진 문제의 요구 사항을 분석하여 정리할 수 있다.
3. 주어진 문제를 해결하기 위한 논리적 흐름을 기술할 수 있다.
4. 주어진 의사 코드를 이용해 프로그램을 구현할 수 있다.
5. 주어진 프로그램을 의사 코드로 표현할 수 있다.
6. 다른 사람이 작성한 C 프로그램 코드를 분석하고, 이해할 수 있다.
7. 다양한 공학 문제를 C 프로그램을 통하여 해결할 수 있다.

3. Class types and activities

During the lecture, we discuss the fundamentals of programming in C. Laboratory sessions help implement solutions to given problems which will help in understanding the course. Active participation is encouraged.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam	1	30~35	
final exam	1	30~45	
quiz			
presentation			
discussion			
homework		10~30	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Problem Solving and Program Design in C 8th ed.	Jeri R. Hanly and Elliot B. Koffman	Pearson	
Ref.	C Programming: A Modern Approach, 2nd e	K. N. King	W. W. Norton & Company	

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course overview, SDLC		Yared Zerihun Bekele			
2	Fundamentals of C		Yared Zerihun Bekele			
3	Formatted Input/Output & Expressions		Yared Zerihun Bekele			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Basic Types & Arrays		Yared Zerihun Bekele			
5	Selection statments & Loops		Yared Zerihun Bekele			
6	Functions		Yared Zerihun Bekele			
7	Pointers I		Yared Zerihun Bekele			
8	Mid exam		Yared Zerihun Bekele			
9	Pointers II		Yared Zerihun Bekele			
10	Strings I		Yared Zerihun Bekele			
11	Strings II		Yared Zerihun Bekele			
12	Structures, Unions, andEnumerations		Yared Zerihun Bekele			
13	Dynamic allocation of memory		Yared Zerihun Bekele			
14	File Operations (creation,modification, deletion		Yared Zerihun Bekele			
15	Bitwise operations		Yared Zerihun Bekele			
16	Final exam		Yared Zerihun Bekele			

11. Other items of notification

Computer Vision and Robot Design

Course Name	Course type (credit/hours)	전선(3/3)			Course code	B101
	Target students Division/major/grade	융합시스템공학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	토1(전511) 토2(전511) 토3(전511)(전511)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	민현정 (조교수/공과대학 융합시스템공학과)				
	Office Room Number	성호관 405	Office phone Number	3844	e-mail	
	Office hours	Saturdays or by appointment		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course covers intelligent robots in industry as well as vision sensors in order to make a good decision for autonomous behaviors of robots. Specifically, we learn how to get meaningful information by applying for classical computer vision algorithms such as image processing and object recognition. Furthermore, this courses covers how to handle moving objects in a video (from robot' s perspectives) for tracking as well as a moving camera in order to control robots under various circumstances. This course aims to integrate intelligent robotics and computer vision. Through the course, it is expected to learn various application in robotics with camera sensors.

2. Course Objectives

3. Class types and activities

Lecture
Experiments with robots ((turtlebot waffle) & vision (RealSense/monocular camera) system
Discussion & team activities

Note:

- 1) This course deals with real robotic platform with a camera sensor including leaning theory & methods about vision & robotics. You have to be an expert in programming skills.
- 2) It is a collaborative teaching course including team activities with the University of St. Thomas in USA. Lecture can be in Korean.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

python 프로그래밍 지식/활용능력
리눅스
인공지능

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		30	
final exam		40	프로젝트
quiz			
presentation			
discussion			
homework		20	과제/토론/활동
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	컴퓨터비전	오일석	한빛아카데미	2014
Main	강의노트			

10. Class system and Class shedule

<p>1단계: mobile robot/collaborative robot의 이해 2단계: 로봇프로그래밍 (ROS) 3단계: 센싱기술 (사물인식/거리감지) 4단계: 실제 문제 적용 및 프로젝트</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction/orientation.	K/E	민현정	강의		
2	Intro to robotics, 로봇 세팅	K/E	민현정	강의/실습/토론		
3	navigation	K/E	민현정	강의/실습/토론		
4	mapping	K/E	민현정	강의/실습/토론		
5	image processing	K/E	민현정	강의/실습/토론		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	detection/segmentation	K/E	민현정	강의/실습/토론		
7	Sensing & localization (LiDAR+Vision)	K/E	민현정	강의/실습/토론		
8	midterm exam	K/E	민현정			
9	ROS	K/E	민현정	강의/실습/토론		
10	ROS	K/E	민현정	강의/실습/토론		
11	tracking	K/E	민현정	강의/실습/토론		
12	Kinematics/manipulation	K/E	민현정	강의/실습/토론		
13	project	K/E	민현정	강의/실습/토론		
14	project	K/E	민현정	강의/실습/토론		
15		K/E	민현정			
16	presentation/final	K/E	민현정	발표		

11. Other items of notification

대면/동영상 혼용수업임
 로봇 실습은 turtlebot3 (waffle)로 팀 당 1개 제공
 온라인으로 미국 학생들과 팀활동 있음 (팀 활동은 zoom으로 함께 방법을 논의하고 각각 local로 따로 실습하는 방법으로 활동함. 다양한 문화와 소통, 배움의 경험을 할 수 있음)

Construction Engineering Management

Course Name	Course type (credit/hours)	전선(3/3)			Course code	E048
	Target students Division/major/grade	건설시스템공학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(팔310) 금D(팔310)(팔310)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	토질역학, 콘크리트공학, 구조역학				
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses	건설프로젝트관리				
Instructor	Name (title/division)	문성근 (부교수/공과대학 건설시스템공학과)				
	Office Room Number	팔달관 510호	Office phone Number	2537	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Construction Engineering Management stems from empirical knowledge, which requires different job-site experiences. There come many unexpected situations and uncertainties during the construction, so we are required to learn practices on top of many other theories.

The construction is the phase to actualise the plan and design. Thus, different aspects must be reviewed, including the construction environment, surroundings, and economic conditions. It is conducted with the targets of quality, cost, time and safety, which we should meet the acceptable requirement. Therefore, this lecture deals with construction materials, equipment, methods, etc., which will help us prepare ourselves for the overall expectation from the real-world situation.

2. Course Objectives

3. Class types and activities

This subject will be delivered as lectures, which include special guest lecture series to help the level of understanding.
The second half of the semester also includes Project Assessment which helps us lead a self-directed learning experience.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	28	10	
midterm exam	1	30	
final exam			
quiz	1	10	
presentation			
discussion	2	10	
homework	1	40	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Construction Equipment and Methods: Planning, Innovation, Safety	Leonhard Bernold	Wiley Global Education	2013
Sub	Construction Planning, Equipment, and Methods, Ninth Edition	Robert L. Peurifoy, Clifford J. Schexnayder, Robert Schmitt, Aviad Shapira	McGraw-Hill Education	2018
Sub	Civil Engineering: Construction Planning and Management	Jim Griffiths	Clanrye International	2018
Ref.	토목시공학 현장 실무를 위한	남기천, 김유성, 김치환, 유광호, 김상환	한솔아카데미	2019

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Induction and Subject Brief	E	문성근			
2	Construction Project Management #1	E	문성근			
3	Construction Project Management #2	E	문성근			
4	Earthwork and Planning	E	문성근			
5	Blasting Technologies and Methods	E	문성근			
6	Construction Equipment (Lecturer)	E	문성근			
7	Construction Equipment (Seminar)	E	문성근			
8	Mid-term Assessment and Break	E	문성근			
9	Guest Lecture#1 _ International Construction	E	문성근			
10	Tunnel Construction	E	문성근			
11	Retaining Wall and Dam	E	문성근			
12	Temporary Structure and Roads	E	문성근			
13	Guest Lecture#2 _ Technology-aided Construction	E	문성근			
14	Construction Scheduling #1	E	문성근			
15	Construction Scheduling #2	E	문성근			
16	Assessment and Summary	E	문성근			

11. Other items of notification

Corporate finance

Course Name	Course type (credit/hours)	전선(3/3)		Course code	1062
	Target students Division/major/grade	경영학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(다307) 목D(다307)(다307)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	재무관리			
	Related basic courses	경영통계			
	Recommmended concurrent courses	투자론			
	Related advanced courses				
Instructor	Name (title/division)	이준엽 (부교수/경영학과)			
	Office Room Number	다산관 319-1호	Office phone Number	2713	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

The primary objective of this course is to provide an understanding of the tools and concepts involved in financial decision-making. Since we have learned the concepts of valuation and risk and return from the first half of the book (financial management course), we will develop an understanding of the capital structure and dividend policy from the latter half of the book and use this understanding to apply it to some of special topics in corporate finance. The special topics include options, short-term finance and planning, raising capital (IPOs), mergers & acquisitions, and corporate governance.

2. Course Objectives

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input checked="" type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input checked="" type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

Excel , PPT,

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam			
final exam			
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Corporate Finance: Core Principles and Application 5/E	Stephen A. Ross, Randolph W. Westerfield, Jeffrey F. Jaffe, Bradford D. Jordan	McGraw-Hill Education	

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
No Data						

11. Other items of notification

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Creative Media Programming

Course Name	Course type (credit/hours)	전선(4/5)			Course code	M032
	Target students Division/major/grade	미디어학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월 10:30~12:00 (산422) 화5(산419) 화6(산419) 목 10:30~12:00 (산422)(산419,산422)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	Computer Programming				
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Teemu H. Laine (교수/소프트웨어융합대학 디지털미디어학과)				
	Office Room Number	산학협력원 618호	Office phone Number	1851	e-mail	
	Office hours	Thursday 9am-11am		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course introduces students to methods and tools related to creative media programming (e.g. interactive arts, games). The course covers two major creative media programming environments: Processing and Godot Game Engine.

During the first part of the course, students learn about Processing, which is a library and Integrated Development Environment (IDE) aimed at media artists, designers, media software creators, and engineers. Using Processing, students learn how to quickly create interactive applications and prototypes that use graphics, video, sound, text, etc. The first part is finalized with Team Project 1 where each team produces an interactive media app prototype using Processing.

During the second part of the course, students learn about the Godot Game Engine that is aimed for creating games and other creative media applications. Godot is famous to be beginner-friendly, and it uses the GDScript language with simple Python-like syntax. Using Godot, students learn how to create creative and highly interactive applications based on 2D graphics, movement, collisions, tile maps, animations, audio, and user interfaces. The second part of the course ends with Team Project 2 where each team creates a simple 2D game using Godot.

Throughout the course, students will complete individual lab assignments to learn and improve the skills needed for creative media programming.

2. Course Objectives

This course has the following educational goals and expected learning outcomes:

1. Learn and practice the Processing library / IDE to create highly interactive media applications
2. Learn how to program creative media applications that combine graphics, sound, video, text, and other media assets.
3. Learn the basics of a game engine to build simple 2D games.
4. Learn how to integrate various media assets into an interactive game.
5. Improve your programming ability
6. Improve team work skills
7. Improve English communication skills

3. Class types and activities

The learning contents are presented through lectures that combine theory, practical programming demonstrations, and discussions.

Students complete individual lab assignments on lecture topics. These labs which help students improve their programming skills and apply the knowledge acquired from the lectures. Professor and TA provide individual support and guidance to the students for the labs.

In team projects, students will work in teams to iteratively design and implement creative media applications. The first team project will be based on Processing, whereas the second team project will be based on Godot. Both team projects are based on the knowledge and skills that the students acquire during the course. During the team projects, teams will have regular meetings with professor and TA(s) to present their progress and to get help.

There will be a KakaoTalk room where students can ask questions and discuss with Professor and TA on any topic.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (Labs; ad-hoc discussions in KakaoTalk) | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Students must have basic English communication skills because the course is delivered 100% in English. There may be a Korean TA but it is not guaranteed.

Moreover, students must have basic programming experience. Previous experience of developing media applications (e.g. games) is useful, but not mandatory.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	Attendance
midterm exam		25	Final exam
final exam			
quiz			
presentation			
discussion			
homework		25	Lab assignments
etc		45	Team Project 1 & Team Project 2
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	Lecture notes, websites links given during the lecture			

10. Class system and Class shedule

The following topics will be covered (tentative):

- ? Processing
 - ? Basics, interaction events
 - ? Presentation, capturing and manipulation of graphics
 - ? Playback, recording and manipulation of video; using computer vision
 - ? Playback, recording and manipulation of sound
 - ? Text handling, fonts, reading/writing files
- ? Godot
 - ? Basics of Godot and GDScript
 - ? 2D movement and collisions
 - ? Tilemaps, animations
 - ? User interface
 - ? Audio
 - ? Navigation (pathfinding) [if there is time]

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction, Introduction to Creativity and Processing	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
2	Processing basics 1	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
3	Procesing basics 2	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
4	Graphics programming	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
5	Video programming	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
6	Sound programming	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
7	Working with text	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
8	Team project work	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
9	Introduction to Godot, GDScript basics	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
10	GDScript basics	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
11	Movement and Collisions 1	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
12	Movement and Collisions 2	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
13	TileMaps, Animations	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
14	User Interface, Sound	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		
15	Navigation / Pathfinding	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice, team project		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
16	Final Exam	E	Teemu H. Laine	Final exam		

11. Other items of notification

Cross-cultural Management

Course Name	Course type (credit/hours)	전선(3/3)			Course code	1035
	Target students Division/major/grade	경영학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	()			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김기민(Kimin Kim) (조교수/경영대학 경영학과)				
	Office Room Number	다산관 306-2호	Office phone Number	3687	e-mail	
	Office hours	Mon 13:00-14:00 & Wed 13:00-14:00		Homepage address	-	
Teaching Assistant	Name (title/division)					
	Office Room Number	-	Office phone Number	-	e-mail	

1. Introduction

The contemporary global business world requires that employees and managers develop cross-cultural competence to work effectively in international assignments, on cross-cultural teams, with increasingly diverse customers and clients, and to effectively collaborate with competitors, suppliers, partners and other relevant stakeholders.

This course is designed to introduce students to comparisons of significant cross-cultural differences and help them to become familiar with ways to effectively anticipate and address cultural differences toward organizational and individual success.

2. Course Objectives

COURSE OBJECTIVES:

1. For the student to better understand how various management functions are impacted by cross-cultural differences.
2. Participants will have the opportunity to become familiar with findings from multiple real world studies of cross-cultural managerial differences.
3. Opportunities will be provided for students to develop specific skills that can be used to anticipate and successfully address cross-cultural differences at a managerial level from theoretical and practical perspectives.

LEARNING OUTCOMES:

1. Students will be able to identify potential intercultural synergies and develop strategic plans to help organizations use them to improve market penetration, employee engagement, customer loyalty, and profits.
2. Students will understand methods of optimizing human performance and potential in organizations.
3. Students will understand culture and how it impacts organizations and businesses.
4. Students will have a working knowledge of several specific countries' cultures and several domestic Korean subcultures.
5. Students will understand human diversity, how it impacts organizations and businesses, and how it relates to culture.
6. Students will demonstrate improved cultural intelligence skills and ability to work with others from different cultures.
7. Students will be aware of and have practice using specific strategies to deal with challenges posed by

3. Class types and activities

There are a few things to be fully noticed due to the format of the course: English and Cyber course.

First, being an 100% English course, all the class activities, including taking lectures, communicating with the instructor and the TA, and writing assignments and exams, shall be conducted only in English. Also, there could be minor penalties for incorrect or inappropriate English writings for the assignments and exams.

Second, being a cyber course, most lectures are delivered via AjouBb platform through the Internet; Recorded video lectures will be updated on weekly basis, and they will be available to watch only for two weeks after their posting.

Students are expected to manage their own resources, such as time and PCs to access to the Internet, and have no difficulties in handling related devices.

Attendance will be checked automatically when watching video lectures in full within a limited period; "Fail" on attendance will be given when watching them with fast forward function, when closing them before completion, or when watching them after due date.

For error-free attendance check, it is strongly recommended to use Google Chrome Browser rather than iOS or other platforms.

It is strongly recommended to check the status of attendance just after finishing watching video lecture every week and instantly contact the TA when finding any problem in attendance check.

Please keep in mind that, according to the University Regulation, F grade shall be given if you fail to attend classes more than a quarter of the whole classes.

Third, communications between the instructor, the TA and the students shall be conducted mostly via Ajou email and AjouBb.

Students are expected to use their official Ajou email address rather than their private email accounts such as gmail.

Students shall take their own responsibility for whatever consequences that may come from not checking their Ajou emails and posting on AjouBb.

Additionally, the exams may be conducted on-line via AjouBb or off-line in class.

In any case, in order to avoid scheduling conflict with other regular courses, the exams can be scheduled on weekends or in the evening on weekdays.

If you are not available to take exams on the above conditions, please reconsider your course registration.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (This course provides online lecture, and requires students to conduct case analyses by | |

5. Support Systems in Use

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Fluency in reading and writing in English is strongly required.

Plagiarism check will be conducted automatically for all the writings you submit onto Ajou Bb, including weekly homework, an assignment, the midterm exam and the final exam.

Please teach yourself what plagiarism is, how to avoid it, etc.; the instructor would not provide lecture on it.

Complying with the University Regulation, F grade will be given to the students who submit writings containing significantly high plagiarism rates.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance
midterm exam	1	30	Midterm Exam
final exam	1	30	Final Exam
quiz			
presentation			
discussion			
homework	10	10	Weekly Homework
etc	1	20	Research Report
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Management Across Cultures: Challenges, Strategies, and Skills (4th ed.)	Steers and Osland	Cambridge University Press	2020
Sub	Understanding Cross-Cultural Management	Browaeyns and Price	Pearson	2019

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction & Overview	E	김기민(Kimin Kim)	Cyber Lecture		
2	Global managers in a changing world	E	김기민(Kimin Kim)	Cyber Lecture		
3	Cultural environments, part 1	E	김기민(Kimin Kim)	Cyber Lecture		
4	Cultural environments, part 2	E	김기민(Kimin Kim)	Cyber Lecture		
5	Organizational environments	E	김기민(Kimin Kim)	Cyber Lecture		
6	Managerial environments	E	김기민(Kimin Kim)	Cyber Lecture		
7	Global leadership	E	김기민(Kimin Kim)	Cyber Lecture		
8	Midterm Exam	E	김기민(Kimin Kim)	-		
9	Cross-cultural communication, part 1	E	김기민(Kimin Kim)	Cyber Lecture		
10	Cross-cultural communication, part 2	E	김기민(Kimin Kim)	Cyber Lecture		
11	Managerial ethics & CSR	E	김기민(Kimin Kim)	Cyber Lecture		
12	Global partnerships & negotiations	E	김기민(Kimin Kim)	Cyber Lecture		
13	Global teams	E	김기민(Kimin Kim)	Cyber Lecture		
14	Global assignments	E	김기민(Kimin Kim)	Cyber Lecture		
15	Lessons learned: a review	E	김기민(Kimin Kim)	Cyber Lecture		
16	Final Exam	E	김기민(Kimin Kim)	-		

11. Other items of notification

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Current Issues in Korean Society

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X520
	Target students Division/major/grade	/			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(울260) 수E(울260)(울260)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommanded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김병관 (부교수/사회과학대학 사회학과)				
	Office Room Number	울곡관 421	Office phone Number	2781	e-mail	
	Office hours	Mon 14:00-15:00 & Thu 13:30-15:00		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

3. Class types and activities

This course will consist mostly of lectures. The lectures in this course are to be administered mostly by the professor in charge of this course.

Class Attendance and Participation:

Class attendance is an important part of the evaluation in this course. On top of the attendance, students are expected to actively participate in class discussions.

4. Teaching Method

lecture

discussion and debate

team project(presentation and case studies)

experiments(role-playing,etc)

designing and production

on-site learning(on-site training)

others

5. Support Systems in Use

e-class

automatic recording system

web-based assignment

cyber lecture

blended learning(combination of online and offline teaching)

class behavior analyzing system

others

6. Teaching Tools

PBL(Problem Based Learning)

CBL(Case Based Learning)

TBL(Team Based Learning)

others

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		15	
midterm exam		30	
final exam		50	
quiz			
presentation			
discussion			
homework		5	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Salmon, Andrew. Modern Korea. London: John Murray Learning. 2014.			
Main	Kim, Kyung-dong and Korea Herald (eds.), Social Change in Korea. Seoul: Jimoondang. 2008.			
Ref.	Reading materials and statistical reports will be posted on e-class.			

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction: Course info and introduction	E	김병관			
2	Geography, Population, History, Economic and Political Institutions	E	김병관			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Legacy of Traditional culture	E	김병관			
4	Cultural Codes and Behavioral Patterns of Koreans	E	김병관			
5	How to do business in Korea	E	김병관			
6	Economy and Industry I	E	김병관			
7	Economy and Industry II	E	김병관			
8	Mid-term Exam Week	E	김병관			
9	Economy and Industry III	E	김병관			
10	Domestic Politics and Int'l Relations I	E	김병관			
11	Domestic Politics and Int'l Relations II	E	김병관			
12	Social Issues in Korea I	E	김병관			
13	Social Issues in Korea II	E	김병관			
14	Popular Culture in Korea	E	김병관			
15	What next for Korea? Students' Presentation and Discussion Session	E	김병관			
16	Final Exam Week	E	김병관			

11. Other items of notification

Data Mining

Course Name	Course type (credit/hours)	전선(3/3)			Course code	F068
	Target students Division/major/grade	소프트웨어학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화F(팔107) 목E(팔107)(팔107)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	자료구조 (Data Structures) 알고리즘 (Algorithms)				
	Related basic courses	확률과통계 (Probability and Statistics), 데이터베이스 (DB)				
	Recommended concurrent courses	인공지능(AI), 데이터베이스 (DB)				
	Related advanced courses					
Instructor	Name (title/division)	이슬 (부교수/소프트웨어융합대학 소프트웨어학과)				
	Office Room Number	산학협력원	Office phone Number	3839	e-mail	
	Office hours		Homepage address	dilab.ajou.ac.kr		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

In this course, you will learn important topics in data mining with a semester-long project. Data mining refers to theories and algorithms for finding useful patterns from massive amount of data and it has been used in various high-impact applications such as web analysis, recommendation system, fraud detection, cybersecurity, etc. The main topics that we will cover include finding similar items, mining frequent patterns, link analysis, recommendation system, data stream mining, graph mining, time series prediction, and outlier detection.

2. Course Objectives

데이터마이닝의 기본 개념과 관련 알고리즘 전반에 대한 학습을 통해 대용량 데이터의 효과적 활용을 통해 데이터로부터 유의미한 정보를 추출할 수 있는 능력을 배양한다.

1. 데이터 마이닝 분야의 기본 주제 개념 및 알고리즘 동작 방식 이해
2. 주어진 데이터에 관련된 응용 문제를 도출할 수 있다.
3. 도출된 문제를 해결하기 위한 효과적 분석 방법을 설계하고 결과에 대한 평가를 할 수 있다.
4. 팀 기반 설계 프로젝트를 구체화하여 적절한 팀워크를 수행할 수 있다.

3. Class types and activities

- the class will be theory-oriented
 - assignments will include problem-solving and programming
 - projects (a proposal, final report, presentation) can be done in any programming language
- (** Any change of plans will be notified asap)

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	
midterm exam		35	
final exam		35	
quiz			
presentation			
discussion			
homework		25	프로젝트 30%
etc			
study hours	3		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Mining of Massive Datasets 3rd ed http://www.mmds.org	Jure LeJur Leskovec, ?An and Rajaraman, ?Jeff Ullman	Cambridge	2020
Sub	Data Mining: The Textbook	Charu C. Aggarwal	Springer	2015

10. Class system and Class shedule

데이터마이닝 기초 학습 후 구체적 응용분야들을 살펴보고 각 응용분야의 주요 알고리즘들은 살펴본다.

응용:

- 패턴 마이닝,
- 링크 분석,
- 추천 시스템,
- 데이터 스트림마이닝,
- 그래프마이닝,
- 시계열 예측 및 이상 값 감지

After learning the basics of data mining, we'll look at specific applications and the main algorithms for each application.

Applications:

- Pattern mining,
- Link analysis,
- Recommendation systems,
- data stream mining,
- graph mining,
- Time series prediction and outlier detection

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	강좌소개및오리엔테이션 & Introduction	E	이슬			
2	Preliminaries – Math	E	이슬			
3	Data Preparation	E	이슬			
4	Finding Similar Items	E	이슬			
5	Locality-Sensitive Hashing	E	이슬			
6	Clustering	E	이슬			
7	Dimension Reduction	E	이슬			
8	중간고사	E	이슬			
9	Recommendation System	E	이슬			
10	Recommendation System	E	이슬			
11	Stream Data Analysis	E	이슬			
12	Frequent Itemsets Mining	E	이슬			
13	Link Analysis	E	이슬			
14	Graphs	E	이슬			
15	Anomaly Detection	E	이슬			
16	기말고사	E	이슬			

11. Other items of notification

2021년 2학기 전체 비대면 강의(주로 실시간 Zoom 강의).
 중간고사 & 기말고사는 수강 인원이 적으면 대면으로 진행한다.

Data Structure

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	F035
	Target students Division/major/grade	소프트웨어학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(팔409) 금D(팔409)(팔409)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Computer programming and practice			
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	HAMANDAWANA PRINCE (조교수/소프트웨어융합대학 소프트웨어학과)			
	Office Room Number		Office phone Number		e-mail
	Office hours	by email appointment		Homepage address	https://sites.google.com/view/princehamandawana/home
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

The Data structures course deals with techniques of how data is represented and manipulated in a computer system. All the computer programs manipulate the data representations in one way or the other. To manipulate this data requires an algorithm. Therefore in this course we are going to explore several ways of data representation and the different algorithms that can be used to manipulate these representations. Data structures is a fundamental course that all computer science and engineering students need to enroll as a basic requirement for other related courses.

2. Course Objectives

3. Class types and activities

The class type will be lecture based with visual cues. Questioning is allowed in between the lecture period both from the instructor and the students.

After class assignments will also be given to students as form of continuous assessment and tracking student understanding of the concepts.

We will also have some random visual question and answer quizzes during classes.

All students should come to every class with a gadget (phone, laptop or tablet) and login to the following URL;

<https://www.classpoint.app?code=0S035>

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (On the hook interactions - encourages frequent instructor-student conversations) | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input checked="" type="checkbox"/> others (Learning with with visualizations - Conceptual |

7. Knowledge and ability required for taking this course

Basic skills in C programming are required.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam	1	25	
final exam	1	35	
quiz			
presentation			
discussion			
homework	6	30	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Fundamentals of Data Structures in C, 2nd Edition	Ellis Horowitz, Sartaj Sahni and Susan Anderson-Freed	Silicon Press	2007

10. Class system and Class schedule

<ol style="list-style-type: none"> 1. Asymptotic notations 2. Basic data types (array, structure, union) 3. Basic data structures (stack, queue, linked list) 4. trees and graphs 5. Sorting algorithms 6. advanced data structures (hashing, height-balanced search trees)

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction, performance analysis	E	HAMANDAWAN A PRINCE	강의	시험	
2	Array, structure, union, polynomial expression	E	HAMANDAWAN A PRINCE	강의	시험, 과제	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Stack, queue, circular queue, stack extension (maze, expression)	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
4	Stack extension	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
5	List operation	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
6	Tree: basic concept, Tree traversal	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
7	Tree: threaded binary tree, binary search tree	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
8	Mid-Term Exams	E	HAMANDAWAN A PRINCE	시험		
9	Tree: heap, set representation, Graph: basic concept	E	HAMANDAWAN A PRINCE	강의	시험	
10	Graph: traversal	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
11	Graph: minimum cost spanning tree	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
12	Graph: shortest path, Sorting: insertion, selection, quick	E	HAMANDAWAN A PRINCE	강의	시험	
13	Sorting: heap, merge, radix, list	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
14	Hashing: basic concept, overflow handling, dynamic hashing	E	HAMANDAWAN A PRINCE	강의	시험, 과제	
15	Search structure: AVL tree, red-blacktree	E	HAMANDAWAN A PRINCE	강의	시험	
16	Final Exam	E	HAMANDAWAN A PRINCE	시험		

11. Other items of notification

Data Structure

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	F036
	Target students Division/major/grade	소프트웨어학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수F(팔325) 금F(팔325)(팔325)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Computer Programming			
	Related basic courses				
	Recommmended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Yared Zerihun Bekele			
	Office Room Number		Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course introduces students to common data structures used in program design and development. It covers data structures such as stacks, queues, trees, graphs, etc. The various operations applied to such data structures will be studied. Moreover, mathematical ways of analyzing and comparing the performances of algorithms are included.

Objectives:

- > Understand the popular data structures used in software development
- > Analyze the computational complexities of algorithms
- > Understand typical algorithms used along with discussed data structures

2. Course Objectives

3. Class types and activities

The followings are included:

- Lectures
- Coding training (Lab session/coding session?)
- Home works
- Quizzes

Active participation is encouraged!

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Knowledge of linear algebra would be a plus.
Self-studying skills
Basic English

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	16	10	
midterm exam	1	30	
final exam	1	40	
quiz			
presentation			
discussion			
homework	2~4	20	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Fundamentals of Data Structures in C, 2nd Edition	Ellis Horowitz, Sartaj Sahni and Susan Anderson-Freed	Silicon Press	2007

10. Class system and Class shedule

<p>In this course, we will be covering the following topics:</p> <ul style="list-style-type: none"> → Introduction to complexity analysis, which is used to analyze the efficiency of data structures/algorithms → Understand recursive algorithms → Basic data structures (Linked Lists, Stacks, Queues) → Trees → Graphs → Searching and Sorting algorithms
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Overview of DS	E	Yared Zerihun Bekele			
2	Time Complexity Analysis	E	Yared Zerihun Bekele			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Recursive algorithms	E	Yared Zerihun Bekele			
4	Arrays and Structures	E	Yared Zerihun Bekele			
5	Linked lists and operations	E	Yared Zerihun Bekele			
6	Stacks and queues	E	Yared Zerihun Bekele			
7	Tree: Basic Concepts and Traversals	E	Yared Zerihun Bekele			
8	Mid Exam	E	Yared Zerihun Bekele			
9	Binary Search Trees	E	Yared Zerihun Bekele			
10	Graph: Basic Concepts and Traversals	E	Yared Zerihun Bekele			
11	Graphs I	E	Yared Zerihun Bekele			
12	Graphs II	E	Yared Zerihun Bekele			
13	Sorting algorithms I and II	E	Yared Zerihun Bekele			
14	Polynomial functions/Matrix	E	Yared Zerihun Bekele			
15	Searching techniques	E	Yared Zerihun Bekele			
16	Final Exam	E	Yared Zerihun Bekele			

11. Other items of notification

Digital Art Programming

Course Name	Course type (credit/hours)	전선(3/3)			Course code	E077
	Target students Division/major/grade	건축학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(원251) 목B(원251)(원251)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김성욱(교수/건축학과)				
	Office Room Number	산학원724호	Office phone Number	1819	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Objective: Logical Thinking / Use of Programming Languages / Creation and Application of Rules for Artwork Production

This course utilizes the programming language Processing to learn the fundamental concepts and techniques of digital design, and applies this knowledge to create artworks based on individual goals. Processing is a powerful tool for graphic and visual expression based on the Java language, designed to make programming accessible for artists and designers. In this course, students will experience the integration of programming and design by working on creative design projects using Processing.

Students will start with the basics of programming and gradually establish their own complex rules. Through these rules, they will experience the interaction where the computer performs various tasks, and the creator judges and modifies these tasks. This process cultivates both logical thinking in programming and creativity in design.

2. Course Objectives

- 프로그래밍 언어의 기본 구조와 활용방식을 습득한다.
 - 디지털 아트와 기본개념과 작업방식을 이해한다.
 - 디지털 아트에 접근하는 주요 전략과 응용개념을 경험한다.
 - 각각의 전략에 따라 작품제작을 수행한다.
- Learn the basic structure and usage of a programming language.
 - Understand the fundamental concepts and methodologies of digital art.
 - Experience key strategies and applied concepts for approaching digital art.
 - Create artworks according to each strategy.

3. Class types and activities

Lecture / Discussion 50%
Assignment / Presentation 50%"

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

컴퓨터 언어에 대한 경험이나 예술작업에 대한 경험이 있으면 도움이 될 수 있으나 반드시 필요하지는 않음

Experience with computer languages or art projects can be helpful but is not required

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	출석 attendance
midterm exam	1	20	중간시험 mid-term exam
final exam	1	30	최종발표 final presentation
quiz	1	10	퀴즈 quiz
presentation		10	발표 presentation
discussion			
homework		20	과제 assignments
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Ref.	수업시간에 따로 설명예정			
Ref.	Youtube에서 "Daniel Shiffman"의 강의 내용 추천			

10. Class system and Class shedule

강의 / 토론 / 과제수행 / 발표
lecture / discussin / Assingment / Presentation

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	introduction	E	김성욱			
2	basics of drawing art	E	김성욱			
3		E	김성욱			
4		E	김성욱			
5		E	김성욱			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6		E	김성욱			
7		E	김성욱			
8		E	김성욱			
9		E	김성욱			
10		E	김성욱			
11		E	김성욱			
12		E	김성욱			
13		E	김성욱			
14		E	김성욱			
15		E	김성욱			
16	final presentation	E	김성욱			

11. Other items of notification

Digital Circuit

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	F064
	Target students Division/major/grade	소프트웨어학과/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(팔309) 수A(팔309)(팔309)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommanded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Yiwen Shen (Assistant Professor/Software and Computer Engineering)			
	Office Room Number		Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Digital Circuit

2. Course Objectives

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam			
final exam			
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
No Data				

10. Class system and Class shedule

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
No Data						

11. Other items of notification

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Digital Circuit

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	F065
	Target students Division/major/grade	/		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화E(팔 1025) 금E(팔 1025)(팔 1025)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommanded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)				
	Office Room Number		Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

2. Course Objectives

3. Class types and activities

4. Teaching Method

<input type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam			
final exam			
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
No Data				

10. Class system and Class shedule

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
No Data						

11. Other items of notification

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Dynamics

Course Name	Course type (credit/hours)	전필(3/3)		Course code	B045
	Target students Division/major/grade	기계공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(서107) 목B(서107)(서107)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	공업역학1(정역학)			
	Related basic courses	물리학 1,2			
	Recommanded concurrent courses				
	Related advanced courses	진동학 및 실습, 시스템 동역학			
Instructor	Name (title/division)	이현범 (부교수/공과대학 기계공학과)			
	Office Room Number	팔달관 1006호	Office phone Number	2947	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

In this course, students will learn basic dynamics including the point-mass model, Newtons dynamics, momentum, etc.

2. Course Objectives

질점, 질점계 및 강체의 2차원, 3차원 운동방정식의 기초를 이해하고 이를 바탕으로 공학의 다양한 분야에 응용 되는 기초적인 동역학 문제들을 풀이할 수 있는 능력배양에 수업의 목표가 있다.

3. Class types and activities

This course is face-to-face lectures. The lecture consists of understanding the basic theory and solving practice problems using them.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* 뉴턴 운동 법칙을 이용하여 동역학 방정식을 세우기 위해서는 공업역학1(정역학) 에서 배운 반력 및 자유물체 도에 대한 지식이 필수적이다. 또한 풀이를 위해서는 기초적인 미분방정식의 해법을 필요로 한다

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	1회 결석 당 총점에서 -1점 감점. 지각 0.5점 감점. 5회 이상 결석 F
midterm exam		40	
final exam		45	
quiz			
presentation			
discussion			
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Engineering Mechanics: Dynamics 5th Ed.	Bedford & Fowler	Prentice Hall	

10. Class system and Class shedule

<p>1. 먼저 동역학에서 사용되는 기본 개념과 단위에 대해서 공부하고, 뉴턴의 법칙, 에너지 보존 법칙, 운동량의 법칙 등을 질점과 2차원 강체에 적용하여 지배 방정식을 유도하고 이를 분석한다.</p> <p>2. 중간시험에서는 질점의 운동 및 에너지 법과 운동량 법을 다룬다. 기말시험에서는 2차원 강체의 운동을 다룬다.</p> <p>3. 각 수업시간에는 해당된 내용에 대한 시사적인 사건의 예를 들고, 이를 해결하거나 방지할 수 있는 해결책에 대하여 토론하다.</p> <p>4. 동역학 교과목은 강의, 과제, 시험을 공동으로 운영한다. 평가는 교과목 단위의 공동 합산 평가이다.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Ch. 12 서론 + Ch. 13 질점의 운동	K	이현범	대면 강의		
2	Ch. 13 질점의 운동	K	이현범	대면 강의	HW1	
3	Ch. 14 힘, 질량, 가속도	K	이현범	대면 강의		
4	Ch. 14 힘, 질량, 가속도	K	이현범	대면 강의		
5	Ch. 14 힘, 질량, 가속도 +Ch. 15 에너 지법	K	이현범	대면 강의	HW2	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Ch. 15 에너지법 + Ch. 16 운동량 원리	K	이현범	대면 강의		
7	Ch. 16 운동량 원리	K	이현범	대면 강의	HW3	
8	중간고사	K	이현범	대면 강의		대면시험
9	Ch. 17 강체의 평면 운동학	K	이현범	대면 강의		
10	Ch. 17 강체의 평면 운동학	K	이현범	대면 강의		
11	Ch. 17 강체의 평면 운동학	K	이현범	대면 강의		
12	Ch. 17 강체의 평면 운동학	K	이현범	대면 강의		
13	Ch. 17 강체의 평면 운동학	K	이현범	대면 강의	HW4	
14	Ch. 19 강체 동역학의 에너지와 운동량	K	이현범	대면 강의		
15	Ch. 19 강체 동역학의 에너지와 운동량	K	이현범	대면 강의	HW5	
16	기말고사	K	이현범	대면 강의		대면시험

11. Other items of notification

Dynamics

Course Name	Course type (credit/hours)	전필(3/3)			Course code	B046
	Target students Division/major/grade	기계공학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화C(서107) 금C(서107)(서107)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	Statics (정역학)				
	Related basic courses	Physics 1, 2 (물리학 1, 2)				
	Recommended concurrent courses					
	Related advanced courses	진동학 및 실습, 시스템 동역학				
Instructor	Name (title/division)	Jong Moon Ha (Mechanical Engineering)				
	Office Room Number	추후공지	Office phone Number		e-mail	
	Office hours	추후공지		Homepage address	추후공지	
Teaching Assistant	Name (title/division)					
	Office Room Number	추후공지	Office phone Number	추후공지	e-mail	추후공지

1. Introduction

The theoretical background of Newton's law on the motion of point mass, point mass system, rigid body, work and energy principle, and momentum principle will be studied. Using the principles, students will learn the systematic methods of making governing equations of motion and analyzing the motion.

2. Course Objectives

질점, 질점계 및 강체의 2차원, 3차원 운동방정식의 기초를 이해하고 이를 바탕으로 공학의 다양한 분야에 응용되는 기초적인 동역학 문제들을 풀이할 수 있는 능력배양에 수업의 목표가 있다.

3. Class types and activities

1. This course is face-to-face lectures. The lecture consists of understanding the basic theory and solving practice problems using them.
2. When an infectious disease such as COVID-19 spreads, video lectures and real-time online lectures are mixed.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* 뉴턴 운동 법칙을 이용하여 동역학 방정식을 세우기 위해서는 정역학에서 배운 반력 및 자유물체도에 대한 지식이 필수적이다. 또한 풀이를 위해서는 기초적인 미분방정식의 해법을 필요로 한다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	
midterm exam		40	
final exam		45	
quiz		0	
presentation		0	
discussion		0	
homework		10	
etc		0	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Engineering Mechanics: Dynamics 5th Ed.	Bedford & Fowler	Prentice Hall (Pearson)	2008

10. Class system and Class shedule

<ol style="list-style-type: none"> 1. 먼저 동역학에서 사용되는 기본 개념과 단위에 대해서 공부하고, 뉴턴의 법칙, 에너지 보존 법칙, 운동량의 법칙 등을 질점과 2차원 강체에 적용하여 지배 방정식을 유도하고 이를 분석한다. 2. 중간시험에서는 질점의 운동 및 에너지 법과 운동량 법을 다룬다. 기말시험에서는 2차원 강체의 운동을 다룬다. 3. 각 수업시간에는 해당된 내용에 대한 시사적인 사건의 예를 들고, 이를 해결하거나 방지할 수 있는 해결책에 대하여 토론한다. 4. 동역학 교과목은 강의, 과제, 시험을 공동으로 운영한다. 평가는 교과목 단위의 공동 합산 평가이다.
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Ch. 12 서론 + Ch. 13 질점의 운동	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
2	Ch. 13 질점의 운동	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
3	Ch. 14 힘, 질량, 가속도	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
4	Ch. 14 힘, 질량, 가속도	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
5	Ch. 15 에너지법	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Ch. 15 에너지법 + Ch. 16 운동량 원리	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
7	Ch. 16 운동량 원리	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
8	중간고사	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
9	Ch. 17 강체의 평면 운동학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
10	Ch. 17 강체의 평면 운동학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
11	Ch. 17 강체의 평면 운동학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
12	Ch. 18 강체의 평면 동역학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
13	Ch. 18 강체의 평면 동역학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
14	Ch. 19 강체 동역학의 에너지와 운동량	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
15	Ch. 19 강체 동역학의 에너지와 운동량	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
16	기말고사	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료

11. Other items of notification

Dynamics

Course Name	Course type (credit/hours)	전필(3/3)			Course code	B047
	Target students Division/major/grade	기계공학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화E(서107) 금E(서107)(서107)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	Statics (정역학)				
	Related basic courses	Physics 1, 2 (물리학 1, 2)				
	Recommended concurrent courses					
	Related advanced courses	진동학 및 실습, 시스템 동역학				
Instructor	Name (title/division)	Jong Moon Ha (Mechanical Engineering)				
	Office Room Number	추후공지	Office phone Number		e-mail	
	Office hours	추후공지		Homepage address	추후공지	
Teaching Assistant	Name (title/division)					
	Office Room Number	추후공지	Office phone Number	추후공지	e-mail	추후공지

1. Introduction

The theoretical background of Newton's law on the motion of point mass, point mass system, rigid body, work and energy principle, and momentum principle will be studied. Using the principles, students will learn the systematic methods of making governing equations of motion and analyzing the motion.

2. Course Objectives

질점, 질점계 및 강체의 2차원, 3차원 운동방정식의 기초를 이해하고 이를 바탕으로 공학의 다양한 분야에 응용되는 기초적인 동역학 문제들을 풀이할 수 있는 능력배양에 수업의 목표가 있다.

3. Class types and activities

1. This course is face-to-face lectures. The lecture consists of understanding the basic theory and solving practice problems using them.
2. When an infectious disease such as COVID-19 spreads, video lectures and real-time online lectures are mixed.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	
midterm exam		40	
final exam		45	
quiz		0	
presentation		0	
discussion		0	
homework		10	
etc		0	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Engineering Mechanics: Dynamics 5th Ed.	Bedford & Fowler	Prentice Hall (Pearson)	2008

10. Class system and Class shedule

<ol style="list-style-type: none"> 1. 먼저 동역학에서 사용되는 기본 개념과 단위에 대해서 공부하고, 뉴턴의 법칙, 에너지 보존 법칙, 운동량의 법칙 등을 질점과 2차원 강체에 적용하여 지배 방정식을 유도하고 이를 분석한다. 2. 중간시험에서는 질점의 운동 및 에너지 법과 운동량 법을 다룬다. 기말시험에서는 2차원 강체의 운동을 다룬다. 3. 각 수업시간에는 해당된 내용에 대한 시사적인 사건의 예를 들고, 이를 해결하거나 방지할 수 있는 해결책에 대하여 토론한다. 4. 동역학 교과목은 강의, 과제, 시험을 공동으로 운영한다. 평가는 교과목 단위의 공동 합산 평가이다.
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Ch. 12 서론 + Ch. 13 질점의 운동	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
2	Ch. 13 질점의 운동	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
3	Ch. 14 힘, 질량, 가속도	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
4	Ch. 14 힘, 질량, 가속도	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
5	Ch. 15 에너지법	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Ch. 15 에너지법 + Ch. 16 운동량 원리	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
7	Ch. 16 운동량 원리	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
8	중간고사	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
9	Ch. 17 강체의 평면 운동학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
10	Ch. 17 강체의 평면 운동학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
11	Ch. 17 강체의 평면 운동학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
12	Ch. 18 강체의 평면 동역학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
13	Ch. 18 강체의 평면 동역학	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
14	Ch. 19 강체 동역학의 에너지와 운동량	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
15	Ch. 19 강체 동역학의 에너지와 운동량	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료
16	기말고사	E	하종문	대면강의	토의·토론 평가, 발표 평가	교재, 강의자료

11. Other items of notification

Dynamics

Course Name	Course type (credit/hours)	전필(3/3)	Course code	B118
	Target students Division/major/grade	AI모빌리티공학과/2학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(혜104) 금D(혜104)(혜104)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	정역학		
	Related basic courses	물리학1, 물리학2		
	Recommanded concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)	이창우		
	Office Room Number	Office phone Number	031-219-3188	e-mail
	Office hours	Homepage address		
Teaching Assistant	Name (title/division)			
	Office Room Number	Office phone Number		e-mail

1. Introduction

We systematically study the theoretical background of Newtons laws of motion, work and energy principles, dynamic force and momentum for matter, mass systems and rigid bodies, and how to establish and analyze equations of motion systems using these.

2. Course Objectives

질점, 질점계 및 강체의 2차원, 3차원 운동방정식의 기초를 이해하고 이를 바탕으로 공학의 다양한 분야에 응용 되는 기초적인 동역학 문제들을 풀이할 수 있는 능력배양에 수업의 목표가 있다.

3. Class types and activities

Many examples are covered to help understand the theory, and problem analysis skills are developed through assignments.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

뉴턴 운동 법칙을 이용하여 동역학 방정식을 세우기 위해서는 공업역학1(정역학) 에서 배운 반력 및 자유물체 도에 대한 지식이 필수적이다. 또한 풀이를 위해서는 기초적인 미분방정식의 해법을 필요로 한다

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	
midterm exam	1	40	
final exam	1	45	
quiz			
presentation			
discussion			
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	추후 공지			

10. Class system and Class shedule

<ol style="list-style-type: none"> 1. Review on concepts of dynamics and terminology. 2. Derivation of equation of point mass motion using Newtons 2nd law and work and energy principle. 3. Study of behaviour of 2 point masses after collision using principle of impulse and momentum. 3. Mathematical derivation of equation for 2D motion of object based on point mass motion. 4. Study on rigid body dynamics using principle of energy and momentum.
--

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Ch. 12 서론 + Ch. 13 질점의 운동	E	이창우			
2	Ch. 13 질점의 운동	E	이창우			
3	Ch. 14 힘, 질량, 가속도	E	이창우			
4	Ch. 14 힘, 질량, 가속도	E	이창우			
5	Ch. 14 힘, 질량, 가속도 +Ch. 15 에너지	E	이창우			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Ch. 15 에너지법 + Ch. 16 운동량 원리	E	이창우			
7	Ch. 16 운동량 원리	E	이창우			
8	중간고사	E	이창우			
9	Ch. 17 강체의 평면 운동학	E	이창우			
10	Ch. 17 강체의 평면 운동학	E	이창우			
11	Ch. 17 강체의 평면 운동학	E	이창우			
12	Ch. 17 강체의 평면 운동학	E	이창우			
13	Ch. 17 강체의 평면 운동학	E	이창우			
14	Ch. 19 강체 동역학의 에너지와 운동량	E	이창우			
15	Ch. 19 강체 동역학의 에너지와 운동량	E	이창우			
16	기말고사	E	이창우			

11. Other items of notification

Electroanalytical Chemistry

Course Name	Course type (credit/hours)	전선(3/3)		Course code	G052
	Target students Division/major/grade	Department of Chemistry (화학과)/2,3 학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화A(성 131) 금A(성 131)(성 131)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Chemistry 1,2, Analytical Chemistry			
	Related basic courses	Physical Chemistry 1			
	Recommended concurrent courses	Physical Chemistry 2			
	Related advanced courses				
Instructor	Name (title/division)		유충열 (부교수/자연과학대학 화학과)		
	Office Room Number	원천관 217호	Office phone Number	2604	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Recently, the importance of understanding electrochemical principles and applications has also been highlighted in relation to renewable energy and carbon neutrality. Among them, as an energy storage and conversion device, secondary batteries play a key role in today's industries such as electronics, information, and transportation, and fuel cells are a core technology for utilizing hydrogen energy. What determines the performance of secondary batteries and fuel cells is the electrochemical reaction that occurs at the electrodes, electrolytes, and electrode/electrolyte interfaces that make up the battery. Therefore, there is a need to understand and apply the electrochemical reactions that occur within the battery. In electroanalytical chemistry, the basics of thermodynamics and reaction kinetics for oxidation-reduction reactions that occur at the electrode/electrolyte interface, and the basics and applications of electrochemical analysis methods are systematically and easily covered. Additionally, lectures are given on secondary batteries and hydrogen fuel cells. By taking this course, you can build the basics for various fields of electrochemistry in the future.

2. Course Objectives

- Coursework Introduction

This course is intended to provide comprehensive coverage of fundamentals for electrochemistry and outline the principles of some important electrochemical measurements.

- Objectives

- 1) To understand the electrochemistry, particularly of electrode reaction, electrolyte and interfacial phenomena σ through an explanation of modern electrochemistry.
- 2) To understand the principles of some electrochemical processes and electrochemical measurements σ and apply the electrochemical techniques to research works.

3. Class types and activities

Lectures are conducted face-to-face, and recorded video materials are provided in preparation for the recurrence of infectious diseases such as COVID-19 and special situations so that students can use them to prepare and review the learning content.

Assignments will be submitted at a level to verify that students have understood the content of the lecture as needed.

Although it is an English lecture, students understanding of electrochemistry is the top priority. Please note that the course progress plan and schedule are subject to change.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

It is recommended that students who have taken "Chemistry 1", "Chemistry 2" and "Analytical Chemistry" will take this course.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam			
final exam			
quiz			
presentation			
discussion			
homework			
etc	1	100	출석 15점 (1회 결석 시 2점씩 감점 (총 8회 결석 = F 학점 부여)), 중간고사 35점, 기말고사 35점, 노트필기 15점)
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Electrochemistry 4th Edition	S.M. Oh	자유아카데미	2024
Sub	전기화학	백운기, 여인형	자유아카데미	2021

10. Class system and Class shedule

<p>This course introduces electrochemical methods of analysis. Advanced topics in chemical equilibrium and kinetics in analytical chemistry and electrochemical methods will also be covered in this course.</p> <p>Electroanalytical Chemistry course mainly focuses on electrochemical methods of analysis, including potentiometric, amperometric, coulometric, and voltammetric analysis.</p> <p>Fundamentals and applications of electrochemical methods as an interdisciplinary field are also introduced.</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Orientation		유충열	Lecture		
2	Introduction (Electrochemistry)		유충열	Lecture		
3	Electrode Potential		유충열	Lecture		
4	Electrolytes		유충열	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Electric double layer		유충열	Lecture		
6	Electrochemical Kinetics (Charge Transfer)		유충열	Lecture		
7	Electrochemical Kinetics (Mass Transfer)		유충열	Lecture		
8	Mid-term Exam		유충열	Exam		
9	Electrochemical instrumentations		유충열	Lecture		
10	Electrochemical Measurements		유충열	Lecture		
11	Electrochemical Measurements		유충열	Lecture		
12	Impedance method		유충열	Lecture, practice	practice with foreign experts	
13	Electrochemical industries		유충열	Lecture		
14	Galvanic cells		유충열	Lecture		
15	Photoelectrochemistry and solar		유충열	Lecture		
16	Final Exam		유충열	Exam		

11. Other items of notification

English 2

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X166
	Target students Division/major/grade	/			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화A(울260) 금A(울260)(울260)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Philip Chivers (조교수/대학 다산학부대학)				
	Office Room Number	성호관 419	Office phone Number	031-219-2831	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course is to familiarize the students with a well-round exposure to the language. The class will be broken up into many kinds of activities. The activities will be done in a way to maximize the students exposure/participation.

2. Course Objectives

Students should acquire the following skills.

1. Learn to search and reflect for the correct and precise usage of vocabulary.
2. Write clear and well-focused sentences and paragraphs.
3. Utilize appropriate register to convey messages.
4. Provide logical support for ideas utilizing reliable sources.
5. Evaluate, revise and edit essays whose length matches the level of the course.

3. Class types and activities

In this class students will participate in a lot of team activities.

1. Warm-up activities
 - a. Word games – Quiz battles on classcard.net on the smartphone, Speed Quiz on vocabulary
 - b. Preview Quiz about each reading in the textbook
2. Talking about the questions about each reading in the textbook in teams
4. Writing about the topics related to each reading
5. Review Quiz

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Students should have a certain level of English skills in listening, speaking, reading and writing.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		15	
midterm exam		30	
final exam		30	
quiz			
presentation		5	
discussion			
homework		20	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	University Success: Reading and Writing (High-beginning)		Pearson Education	2020

10. Class system and Class shedule

<p>In this class students will participate in a lot of team activities.</p> <ol style="list-style-type: none"> 1. Warm-up activities <ol style="list-style-type: none"> a. Word games - Quiz battles on classcard.net on the smartphone, Speed Quiz on vocabulary b. Preview Quiz about each reading in the textbook 2. Talking about the questions about each reading in the textbook in teams 4. Writing about the topics related to each reading 5. Review Quiz

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction	K/E	Philip Chivers			
2	Chapter 1	K/E	Philip Chivers			
3	Chapter 2	K/E	Philip Chivers			
4	Chapter 2	K/E	Philip Chivers			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Chapter 3	K/E	Philip Chivers			
6	Chapter 3	K/E	Philip Chivers			
7	Chapter 4	K/E	Philip Chivers			
8	Mid-term exam	K/E	Philip Chivers			
9	Chapter 5	K/E	Philip Chivers			
10	Chapter 5	K/E	Philip Chivers			
11	Chapter 6	K/E	Philip Chivers			
12	Chapter 6	K/E	Philip Chivers			
13	Chapter 7	K/E	Philip Chivers			
14	Chapter 7	K/E	Philip Chivers			
15	Chapter 8	K/E	Philip Chivers			
16	Final exam	K/E	Philip Chivers			

11. Other items of notification

Absolute evaluation

A+ 100-95

A 94-90

B+ 89-85

B 84-80

C+ 79-75

C 74-70

D+ 69-65

D 64-60

59- F

English Communication for English Majors

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	J047
	Target students Division/major/grade	영어영문학과/Freshmen		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화D(다311) 목C(다311)(다311)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommanded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Kevin Hawthorne (조교수/대학 다산학부대학)			
	Office Room Number	성호관420호	Office phone Number	2830	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

2. Course Objectives

English Communication for English Majors (ECEM) is designed for students who have a high-intermediate level of English or above. The focus of this course is on improving students abilities to have meaningful discussions about serious topics. A wide variety of readings provide useful language examples, and stimulate interest in the topics and themes. Students are expected to actively participate in class small-group discussions, debates, and presentations based on the issues raised in the class material

3. Class types and activities

Speaking lessons include pair work, small group discussions, class discussions and task-based communicative activities. There are three main speaking assignments: A group presentation, a special seminar, and an impromptu debate.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

A high-intermediate to advanced level of English is assumed for students of ECEM

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		30%	
discussion		10%	
homework			
etc		20%	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	Small Group Discussion Topics for Korean Students, A Modern Approach to Fluency in English,	Jack Martire	PNU Press	2013
Main	Instructor will provide additional materials			

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction and Syllabus		Kevin Hawthorne	face-to-face		
2	Issues 1 & 2		Kevin Hawthorne	face-to-face		
3	Issues 3 & 4		Kevin Hawthorne	face-to-face		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Issues 5 & 6		Kevin Hawthorne	face-to-face		
5	Group Presentations		Kevin Hawthorne	face-to-face		
6	Issues 7 & 8		Kevin Hawthorne	face-to-face		
7	Issue 9 & midterm review		Kevin Hawthorne	face-to-face		
8	Midterm Exam		Kevin Hawthorne	face-to-face		
9	Issues 10 & 11		Kevin Hawthorne	face-to-face		
10	Issues 12 & 13		Kevin Hawthorne	face-to-face		
11	Issues 14 & 15		Kevin Hawthorne	face-to-face		
12	Individual Seminars		Kevin Hawthorne	face-to-face		
13	Issues 16 & 17		Kevin Hawthorne	face-to-face		
14	Issues 18 & review		Kevin Hawthorne	face-to-face		
15	Impromptu Debates (Oral Test)		Kevin Hawthorne	face-to-face		
16	Final Exam		Kevin Hawthorne	face-to-face		

11. Other items of notification

English Communication for English Majors (E.C.E.M.) will be taught face-to-face if Covid-19 conditions allow. Be prepared to attend classes on campus in the classroom. However, if conditions change, it may be necessary to deliver part or all of the course online. Therefore, please also be prepared to participate online using Zoom if this becomes necessary.

English Composition for English Majors

Course Name	Course type (credit/hours)	전필 (3/3)			Course code	J046
	Target students Division/major/grade	영어영문학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(다205-A) 목D(다205-A)(다205-A)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Philip Chivers (조교수/대학 다산학부대학)				
	Office Room Number	성호관 419	Office phone Number	031-219-2831	e-mail	
	Office hours	Mon B 10.30-11.45, Weds B 10.30-11.45, Thurs B 10.30-11.45		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	philip@ajou.ac.kr

1. Introduction

Composition 1 is designed to help students write effective paragraphs and produce short essays. The course focuses on writing fundamentals such as grammar, punctuation, sentence construction, clarity, and coherence. We will look at paragraph structure and organization, leading to a short essay. In class, we will study different types of paragraphs, which may include classification, comparison, problem/solution and cause-effect. With skills learnt in this course, students will be able to write an academic paragraphs and essays. The course is recommended for students who need to write academic papers and also for those preparing for the TOEFL, TOEIC and IELTS writing tests.

2. Course Objectives

3. Class types and activities

lecture, groupwork, in-class writing

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (This course will involve individual and team writing activities. There will be group work to | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input checked="" type="checkbox"/> others (As this class is writing based, there will be a lot |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.
- * We often use Google docs. Make sure that you are prepared to access Google apps.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance – 2% for 2 unexcused absences and –2% for each additional unexcused absence. 3 lates constitutes 1 absent
midterm exam		20	Classification essay (500–700 words)
final exam		20	Problem/solution essay (500–700 words)
quiz		20	Online writing quiz about questions covered in the paragraph section of the course. Academic paragraph (11–14 sentences) 10% quiz + 10% paragraph
presentation			
discussion			
homework		20	Cause & effect team essay (500–700 words)
etc		10	Daily class participation. Being active in learning and helping others learn
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Etc	PPT files available in class	N/A	N/A	2024
Main	Great Writing 3 Fifth Edition	Keith S. Folse et al	Cengage Learning	2020

10. Class system and Class shedule

<p>Competencies</p> <p>By the end of the course, students will be expected to be able to:</p> <ul style="list-style-type: none"> ?Understand the fundamentals of English grammar and punctuation. ?Support a thesis and construct a convincing argument. ?Analyse and revise their own writing and the writing of others. ?Understand how writers consider purpose, audience and voice. ?Understand the ways in which content, form, and context combine to create meaning and effect. ?Plan and write an essay that is mechanically, grammatically, and organizationally sound. <p>Objectives</p> <p>To achieve these competencies, students will develop skills in the categories listed below:</p> <ul style="list-style-type: none"> ?Process Writing: apply brainstorming, outlining, drafting, self-editing, peer-editing, and revision. ?Rhetorical Forms: Excel at various rhetorical forms and writing styles. ?Mechanics: Develop greater accuracy in punctuation, spelling, and capitalization. ?Grammar: Write a variety of compound, complex, and compound-complex sentences. ?Organisation: Organise writing through unity, coherence, and/or cohesion devices such as conjunctions, transition signals, consistent and appropriate pronoun usage, and the repetition of keywords. <p style="padding-left: 40px;">Appropriate organizing principles, such as chronological, spatial, and logical, should be employed.</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to academic writing	E	Philip Chivers			
2	Paragraph writing, formatting, topic sentences, complex sentences, writing process	E	Philip Chivers			
3	Writing mechanics, Unit 2	E	Philip Chivers			
4	Unit 3	E	Philip Chivers			
5	Unit 4: Classification Essay	E	Philip Chivers			
6	Unit 4: Classification Essay	E	Philip Chivers			
7	Unit 4: Classification Essay	E	Philip Chivers			
8	Mid-Term Exam Classification Essay	E	Philip Chivers			
9	Unit 5: Cause & Effect Essay	E	Philip Chivers			
10	Unit 5: Cause & Effect Essay	E	Philip Chivers			
11	Unit 5: Cause & Effect Essay	E	Philip Chivers			
12	Unit 7: Problem/Solution Essay	E	Philip Chivers			
13	Unit 7: Problem/Solution Essay	E	Philip Chivers			
14	Unit 7: Problem/Solution Essay	E	Philip Chivers			
15	Unit 6: Comparison Essay	E	Philip Chivers			
16	Final Exam Problem/Solution Essay	E	Philip Chivers			

11. Other items of notification

Writing techniques will be taught in the form of classroom lectures, extracurricular assignments, peer editing and essays. Certain concepts covered in the classroom will be reviewed in depth in the homework. Students will be encouraged to use MS Word for all submitted writing homework.

Financial Management

Course Name	Course type (credit/hours)	전필 (3/3)			Course code	1030
	Target students Division/major/grade	경영학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(다B106) 수A(다B106)(다B106)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김주현 (조교수/경영대학 경영학과)				
	Office Room Number	다산관 505-2	Office phone Number	3688	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This is an introductory course in corporate financial management. Students will become familiar with the various concepts and tools used to manage financial management issues within a framework of the "law of one price". Topics will include, but will not necessarily be limited to, interest rates and the time value of money, valuing projects and firms, and risk and return.

2. Course Objectives

3. Class types and activities

Classes will be held offline and be lecture-based.
Assignments and other class related announcements will be posted on Ajou BB.
There will be 2 assignments during the semester, in which you will handle real financial data.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		30	
final exam		30	
quiz			
presentation			
discussion			
homework		30	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Etc	Texas Instruments BA II Plus Calculator			
Main	Corporate Finance: The Core, 5th Edition	Berk & DeMarzo	Pearson	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction, the Corporation	E	김주현	Lecture		Chapter1
2	Financial Statement Analysis	E	김주현	Lecture		Chapter2
3	Financial Decision Making and the Law of One Price	E	김주현	Lecture		Chapter3
4	Time Value of Money	E	김주현	Lecture		Chapter4

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Interest Rates	E	김주현	Lecture		Chapter5
6	Valuing Bonds	E	김주현	Lecture		Chapter6
7	Investment Decision Rules	E	김주현	Lecture		Chapter7
8	Midterm Exam	E	김주현			
9	Fundamentals of Capital Budgeting	E	김주현	Lecture		Chapter8
10	Valuing Stocks	E	김주현	Lecture		Chapter9
11	Capital Markets and the Pricing of Risk	E	김주현	Lecture		Chapter10
12	Optimal Portfolio Choice	E	김주현	Lecture		Chapter11
13	The Capital Asset Pricing Model	E	김주현	Lecture		Chapter11
14	Estimating the Cost of Capital	E	김주현	Lecture		Chapter12
15	Investor Behavior and Capital Market Efficiency	E	김주현	Lecture		Chapter13
16	Final Exam	E	김주현			

11. Other items of notification

? The TI BA II Plus financial calculator is recommended, but not required. If you choose a non-financial calculator, you may be required to calculate PV and NPV without the aid of TVM or NPV functions on a financial calculator.

? There will be 2 assignments throughout the semester. Unless specified, each work must be original and individually done.

?Plagiarism or academic dishonesty will not be tolerated.

?In line with Article 26 of Undergraduate Operational Regulation of Ajou University, students missing more than 1/4 of classes will be graded an F. The same article specifies which circumstances can be excepted.

?There will be penalties for assignments that are handed in late.

?All re-grading requests must be made within one week of receiving the score, in written form. On submission, the entire exam will be re-graded, and the resulting score will be final.

?Checking Ajou BB for assignments and class-related communications will be the student's responsibility.

?Notes (PowerPoint slides and other material) provided are for use in the course only. They are not to be reproduced or redistributed outside the class.

?Allowances for personal schedules (plane tickets etc.) will not be made. It is the student's responsibility to be aware of the academic semester dates and plan accordingly.

Financial Management

Course Name	Course type (credit/hours)	전필(3/3)			Course code	1031
	Target students Division/major/grade	경영학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(연암104) 수E(연암104)(연암104)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김주현 (조교수/경영대학 경영학과)				
	Office Room Number	다산관 505-2	Office phone Number	3688	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This is an introductory course in corporate financial management. Students will become familiar with the various concepts and tools used to manage financial management issues within a framework of the "law of one price". Topics will include, but will not necessarily be limited to, interest rates and the time value of money, valuing projects and firms, and risk and return.

2. Course Objectives

3. Class types and activities

Classes will be held offline and be lecture-based.
Assignments and other class related announcements will be posted on Ajou BB.
There will be 2 assignments during the semester, in which you will handle real financial data.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		30	
final exam		30	
quiz			
presentation			
discussion			
homework		30	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Etc	Texas Instruments BA II Plus Calculator			
Main	Corporate Finance: The Core, 5th Edition	Berk & DeMarzo	Pearson	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction, the Corporation	E	김주현	Lecture		Chapter1
2	Financial Statement Analysis	E	김주현	Lecture		Chapter2
3	Financial Decision Making and the Law of One Price	E	김주현	Lecture		Chapter3
4	Time Value of Money	E	김주현	Lecture		Chapter4

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Interest Rates	E	김주현	Lecture		Chapter5
6	Valuing Bonds	E	김주현	Lecture		Chapter6
7	Investment Decision Rules	E	김주현	Lecture		Chapter7
8	Midterm Exam	E	김주현			
9	Fundamentals of Capital Budgeting	E	김주현	Lecture		Chapter8
10	Valuing Stocks	E	김주현	Lecture		Chapter9
11	Capital Markets and the Pricing of Risk	E	김주현	Lecture		Chapter10
12	Optimal Portfolio Choice	E	김주현	Lecture		Chapter11
13	The Capital Asset Pricing Model	E	김주현	Lecture		Chapter11
14	Estimating the Cost of Capital	E	김주현	Lecture		Chapter12
15	Investor Behavior and Capital Market Efficiency	E	김주현	Lecture		Chapter13
16	Final Exam	E	김주현			

11. Other items of notification

? The TI BA II Plus financial calculator is recommended, but not required. If you choose a non-financial calculator, you may be required to calculate PV and NPV without the aid of TVM or NPV functions on a financial calculator.

? There will be 2 assignments throughout the semester. Unless specified, each work must be original and individually done.

?Plagiarism or academic dishonesty will not be tolerated.

?In line with Article 26 of Undergraduate Operational Regulation of Ajou University, students missing more than 1/4 of classes will be graded an F. The same article specifies which circumstances can be excepted.

?There will be penalties for assignments that are handed in late.

?All re-grading requests must be made within one week of receiving the score, in written form. On submission, the entire exam will be re-graded, and the resulting score will be final.

?Checking Ajou BB for assignments and class-related communications will be the student's responsibility.

?Notes (PowerPoint slides and other material) provided are for use in the course only. They are not to be reproduced or redistributed outside the class.

?Allowances for personal schedules (plane tickets etc.) will not be made. It is the student's responsibility to be aware of the academic semester dates and plan accordingly.

Free Drawing Exercise

Course Name	Course type (credit/hours)	교선(3/3)		Course code	X024
	Target students Division/major/grade	/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화C(다506) 금C(다506)(다506)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses	예술이란 무엇인가			
Instructor	Name (title/division)	임장순 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours	매 수업 종료시		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Drawing is a medium not only to sketch and organize ideas before main artwork production but also to function as an independent art form. Presuming the drawing functions simply and directly for the artistic communication between artist and viewer, the class is to encourage students to produce, analyze, and criticize their and other students drawing work and explore the definition and boundary of the genre through research and practice.

Course Goal

The main purpose of the class is for each student to learn from basic drawing techniques to visualize and describe their theme of the work. The goal of the class is to provide students with an in-depth understanding of the drawing and its possibilities of various expressions. Participating students will be able to develop the analytical thinking skills necessary in the creation process and how to write about their work through a teaching method that focuses on questions asked during the creative process rather than predetermined answers.

2. Course Objectives

본 강의는 기초적인 드로잉의 기술을 학습하는 것에서부터, 작품의 주제의식을 시각화하며 구술할 수 있는 연구과정을 포괄합니다. 수업을 통해 학생들은 드로잉의 장르에 관한 이해와 표현적 가능성에 대한 심도있는 고찰을 하는 것에 그 학습의 목표가 있습니다. 참가 학생들은 실습을 함에 있어 이미 정해져 있는 답보다는 창작의 과정 속에서 얻게 되는 질문들에 중점을 두는 수업 방식을 통해 작품 창작 과정에서 필요한 분석적 사고력과 함께 자신의 작품에 대해 구술하는 방법을 정립할 수 있습니다.

3. Class types and activities

The class will begin with lecture about weekly drawing projects and then students drawing practice will be followed. The lecturer will have short presentation about each class curriculum in the first 15-20 minutes, and students will do individual / group practice after. During the practice, students can have questions to the lecturer and there can possibly be a short individual lesson for each student. At the every last class of each week, students submit complete art work digitally or in person.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

기초적인 드로잉 학습을 위한 수업이기 때문에 특별한 사전 지식과 도구능력은 필요하지 않습니다.
Since the class is for learning basic drawing, no special prior knowledge or skills are required.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	15	30	본 수업은 실기수업을 위한 학생들의 참여도가 중요하므로 출석에 대한 성적 반영은 엄격히 이루어질 예정입니다. 30% (4 tardiness = 1 absence, more than 8 absence will give F score)
midterm exam	1	20	수업의 중간 성과를 약 한시간 가량의 드로잉 작품 완성으로 평가합니다. (complete a drawing based on class curriculum)
final exam	1	20	수업의 최종 성과를 약 한시간 가량의 드로잉 작품 완성으로 평가합니다. (complete a drawing based on class curriculum)
quiz			
presentation			
discussion			
homework	10	30	매주 마지막 수업마다 제출하는 수업시간 내의 작업 결과물을 통해 각 수업에 대한 학생들의 이해도를 점검합니다. 30% (online submission at the end of each week)
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	예술 작품의 근원(The Origin of Work of Art)	마르틴 하이데거(M. Heidegger)	예전사	1998

10. Class system and Class shedule

매 수업은 각 학습 주제에 관한 개괄과 참가 학생들의 실습으로 구성됩니다. 학기 초반에는 실기 도구에 관한 학습과 기초적인 드로잉 기술을 익히는 것으로 시작하여, 학기 말에는 속도감 있는 드로잉과 이야기가 있는 드로잉 등, 사전에 학습한 드로잉의 기술들을 보다 심도있게 작품에 응용하는 순서로 진행됩니다. 이를 통해 학생들은 드로잉의 기본적인 요소들로부터 전문적인 영역까지 학습의 경험을 확대해 나갈 수 있습니다.

The class will begin with lecture about weekly drawing projects and then students drawing practice will be followed. The lecturer will have short presentation about each class curriculum in the first 15-20 minutes, and students will do individual / group practice after. During the practice, students can have questions to the lecturer and there can possibly be a short individual lesson for each student. At the last class of each week, students submit complete artwork digitally or in person.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	수업소개 / 작품감상 Lecture introduction / Drawings review	K	임장순	대면수업	평가 없음	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
2	정물 드로잉 - 선연습 / 정물의 형태 Drawing line / Still life drawing (form, composition)	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
3	정물 드로잉 - 명암, 그림자 Still life drawing (tone, shadow)	E	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
4	정물 드로잉 - 잉크 Still life drawing (ink)	K	임장순	대면수업	과제 제출 평가 (Assignment)	잉크, 붓, 4절지 스케치북 Ink, brush, sketchbook
5	인물 드로잉 Figure drawing	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
6	정밀묘사 Drawing in detail	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
7	풍경 드로잉 - 실내 Landscape drawing (interior)	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
8	중간고사 mid-term (Still life drawing)	K	임장순	대면수업	실기평가 (complete a drawing)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
9	작품감상 Paintings review	K	임장순	대면수업	감상평 제출 (submit work review)	준비물 없음 No materials required
10	풍경 드로잉 - 야외 Landscape drawing (outside)	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
11	속도감 있는 드로잉 1 Quick drawing (5min, 3min, 2min)	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 8절지 스케치북 Pencil, eraser, sketchbook
12	선드로잉 - 풍경 Line drawing (interior, outside)	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
13	콜라주 Collage	K	임장순	대면수업	과제 제출 평가 (Assignment)	사진, 잡지, 신문 등, 칼, 풀, 4절지 스케치북 photo prints, scissor, cutter, glue
14	이야기가 있는 드로잉 Drawing narratives	K	임장순	대면수업	과제 제출 평가 (Assignment)	연필, 지우개, 4절지 스케치북 Pencil, eraser, sketchbook
15	기말고사 Final (Drawing narratives)	K	임장순	대면수업	실기 평가 (complete a drawing)	연필, 지우개, 필기구, 4절지 스케치북

11. Other items of notification

Fundamental Circuit Theory

Course Name	Course type (credit/hours)	전선(3/3)		Course code	B119
	Target students Division/major/grade	AI모빌리티공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수B(혜104) 금B(혜104)(혜104)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	수학2, 공업수학A			
	Related basic courses	수학1, 물리학1, 물리학2			
	Recommmended concurrent courses	전자기학			
	Related advanced courses	-			
Instructor	Name (title/division)	이창우			
	Office Room Number	Office phone Number	031-219-3188	e-mail	
	Office hours	Homepage address			
Teaching Assistant	Name (title/division)				
	Office Room Number	Office phone Number		e-mail	

1. Introduction

Circuit theory deals with the characteristics of basic circuit elements, laws applied to circuits, principles of linearity, circuit analysis techniques, and theorems for the analysis of basic direct current circuits. We study the time response of circuits containing inductors and capacitors, which are energy storage elements. In addition, we study analysis methods for alternating current sinusoidal circuits, power, circuit analysis in the frequency domain using integral transformation, and circuit analysis using Laplace transform. Electrical and Electronic Engineering is an essential basic subject and is necessary for understanding electricity and electronic systems and devices in everyday life.

Main contents: Electrical quantity, circuit elements, Ohms law, Kirchhoffs law, node and loop analysis, superposition principle, Thevenin, Norton theorem, RC, RL, RLC circuit response, sine wave and phasor, impedance, AC rms value, active and reactive power, power factor Circuit analysis using Laplace transform

2. Course Objectives

회로이론에 대한 이해와 응용 방법을 학습할 수 있다.

3. Class types and activities

Many examples are covered to help understand the theory, and problem analysis skills are developed through assignments and computer analysis techniques using Matlab programs are taught.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

미분, 적분과 선형 미분방정식의 해법과 행렬연산에 관한 수학지식이 필요하며, 컴퓨터를 이용하여 전기회로를 모델링 하고 해석하기 위해 PSpice나 Matlab 등의 Tool을 이용한다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	
midterm exam	1	40	
final exam	1	45	
quiz		10	
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	추후 공지			

10. Class system and Class shedule

<ul style="list-style-type: none"> - 회로이론은 직류회로 및 교류회로를 다룸 - 저항회로의 해석과 중첩원리 - 등가회로를 이용한 복잡한 회로의 간략화 - 에너지 저장 소자를 포함하는 회로의 시간응답 해석 - 교류회로 해석 - 미분방정식 및 라플라스 변환을 이용한 RLC 회로의 해석

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	기본개념, 회로요소 (전압,전류, 전압원,전류원), 오옴법칙	E	이창우			
2	회로요소 (전압,전류, 전압원, 전류원), 오옴법칙, Kirchhoff법칙, 중속전원	E	이창우			
3	저항회로 (직렬병렬조합, 델타-와이 등가변환)	E	이창우			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	저항회로 (분압기, 분류기), 마디해석	E	이창우			
5	루프해석, 마디해석 및 루프해석간의 관계	E	이창우			
6	중첩정리, 소스변환, 테브난/노턴 등가, 최대전력전달	E	이창우			
7	인덕턴스, 커패시턴스, 상호인덕턴스	E	이창우			
8	중간고사	E	이창우			
9	RL 및 RC 회로	E	이창우			
10	RL 및 RC 회로, RLC 회로	E	이창우			
11	RLC 회로, 정현파 소스 및 응답, 페이지	E	이창우			
12	정현파 소스 및 응답, 페이지, 교류 회로해석	E	이창우			
13	교류회로 해석	E	이창우			
14	교류전력 계산	E	이창우			
15	라플라스 변환을 이용한 회로해석	E	이창우			
16	기말고사	E	이창우			

11. Other items of notification

Fundamentals of Automotive Engineering

Course Name	Course type (credit/hours)	전선(3/3)		Course code	B025
	Target students Division/major/grade	기계공학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화F(서307) 목E(서307)(서307)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses	열역학, 유체역학, 동역학			
	Recommended concurrent courses				
	Related advanced courses	모터이론및제어, 엔진공학			
Instructor	Name (title/division)	이현범 (부교수/공과대학 기계공학과)			
	Office Room Number	팔달관 1006호	Office phone Number	2947	e-mail
	Office hours	온라인 상담으로 상시 가능		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course covers the essential knowledge required for the design and development of various automotive components, such as power sources, power transmission systems, braking systems, and suspension systems. It focuses on the configuration and performance characteristics of power systems like engines and motors, energy efficiency, as well as theories related to environmental and safety regulations and corresponding technologies.

Automobiles encompass a wide range of topics in mechanical engineering, electrical engineering, and electronics, including thermofluids, energy, environment, solid mechanics, and manufacturing. For students, this course will serve as an introduction to applied products, providing detailed explanations of the structure, operating principles, various concepts, and applications.

The goal is to enable students to apply this knowledge to the design of automotive and mechanical systems.

Especially for those aiming to enter the automotive field, this course is recommended as an introductory foundational course for future advanced studies.

2. Course Objectives

1. 교육목표:

자동차를 구성하는 각종 서브시스템에 대한 원리와 이들 서브시스템을 조합한 통합시스템에 대한 동력흐름 및 상호 관련성을 이해하도록 하여 관련 고급과목 수강시 자동차에 대한 전반적인 기초지식을 배양한다.

2. 교과목 학습성과:

- 1) 자동차와 관련된 구조, 동작원리 및 관련지식을 학습함으로써 기계공학의 기본지식에 대한 응용능력을 기를 수 있다.
- 2) 자동차의 운동과 동력 및 조향성능에 대한 기본이론을 실제 차량의 운동과 관련된 문제해석에 적용하여 봄으로써 응용능력을 기를 수 있다.
- 3) 현실적인 문제에 대해 공학적인 접근을 통해 수식화하여 문제를 해결하는 경험과 능력을 배양할 수 있다.
- 4) 산업현장에 대한 간접체험을 통해 엔지니어로서의 소양과 자세를 함양하고, 문제해결 능력을 배양할 수 있다.

3. Class types and activities

The course will be conducted twice a week for a total of 3 hours. Understanding of the course content and acquisition of related knowledge will be enhanced through approximately 10 assignments.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

1. 엔진 또는 모터의 동력 발생 및 동력전달 과정을 이해하기 위한 역학적 지식(열역학, 물리학)
2. 차량의 동력성능을 이해하기 위한 종방향 차량동역학 학습에 필요한 기초 역학적 지식(동역학, 유체역학)
3. 차량의 제동, 조향, 현가장치 등과 같은 각각 서브시스템 설계이론을 학습하기 위한 역학적 기초지식

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	4회 이상 결석시 1회당 1% 감점
midterm exam	1회	40	대면 필기고사
final exam	1회	40	대면 필기고사를 원칙으로 함
quiz			
presentation			
discussion			
homework		15	총 10회의 과제물에 대한 평가를 실시한다.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	강의노트			

10. Class system and Class shedule

(1) 자동차 산업 전반에 대한 개략적인 이해를 바탕으로 기계공학을 전공하는 엔지니어로서 자동차공학 분야의 어느 곳에 어떤 것(이론)이 필요한지 또는 활용되고 있는지 그리고 우리가 앞으로 하여야 할 일은 어떤 일인가 하는 문제에 대한 개요를 이해한다. 아울러 자동차의 기술환경, 특히 환경문제와 관련하여 기술적인 문제와 대응현황과 미래에 대해서도 학습하여 향후 관련 고급과목에서의 학습목표를 제고한다.

(2) 자동차의 동력성과 연비에 대한 이론을 학습하고 실제 차량의 거동을 설명함으로써 엔진, 변속기, 동력전달계 각 요소에 대한 단품과 차량으로 결합되었을 때의 시스템 이론과의 관계를 이해하도록 한다. 이 단계에서는 각 단품에 대한 것은 간략한 모델로 간주하여 시스템 특성 파악에 주력한다.

(3) 종방향 차량 동력학을 학습하여 차량의 동력성과 연비(또는 전비)의 기초지식을 학습한다.

(4) (2)(3) 단계에서 학습한 시스템의 요소들, 즉, 엔진 및 전기모터/변속기/동력전달계 각 요소,에 대해 보다 상세히 이론적인 학습을 한다. 이는 향후 보다 고급과목인 자동차동력시스템S/W응용및실습, 자동차전자제어및실습에서 학습할 때의 학습목표 설정을 할 수 있도록 한다.

(5) 자동차의 조향, 제동, 현가 및 전장 시스템에 대한 기본이론과 원리를 학습하여 자동차에 필요한 제반 서브시스템 설계 및 개발에 대한 기본적인 이해와 기초지식을 배양, 심화학습의 기초를 다진다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	자동차 산업의 현황과 전망	E	이현범	멀티미디어 활용 강의		
2	자동차의 구조와 분류	E	이현범	멀티미디어 활용 강의		
3	자동차의 각종 제원의 이해	E	이현범	멀티미디어 활용 강의		
4	종방향 차량 동력학 기초이론(1)	E	이현범	멀티미디어 활용 강의		
5	종방향 차량 동력학 기초이론(2)	E	이현범	멀티미디어 활용 강의		
6	자동차용 동력원 - 엔진(1)	E	이현범	멀티미디어 활용 강의		
7	자동차용 동력원 - 엔진(2)	E	이현범	멀티미디어 활용 강의		
8	중간고사	E	이현범	멀티미디어 활용 강의		
9	자동차용 동력원 - 모터(1)	E	이현범	멀티미디어 활용 강의		
10	자동차용 동력원 - 모터(2)	E	이현범	멀티미디어 활용 강의		
11	동력전달시스템	E	이현범	멀티미디어 활용 강의		
12	제동시스템	E	이현범	멀티미디어 활용 강의		
13	조향시스템	E	이현범	멀티미디어 활용 강의		
14	현가시스템	E	이현범	멀티미디어 활용		
15	자율주행시스템	E	이현범	멀티미디어 활용		
16	기말고사	E	이현범			

11. Other items of notification

- 3회 결석까지 감점 없음
- 4회 결석부터 1%씩 감점
- 과제물을 지각 제출하는 경우 하루당 3점 감점
- 과제나 시험에서 부정이 적발되면 0점 처리

Geotechnical Engineering Design

Course Name	Course type (credit/hours)	전선(3/3)			Course code	E034
	Target students Division/major/grade	건설시스템공학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(팔310) 수C(팔310)(팔310)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	토질역학				
	Related basic courses	토질역학				
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	장일한 (부교수/공과대학 건설시스템공학과)				
	Office Room Number	팔달관 509호	Office phone Number	2503	e-mail	
	Office hours	월.수 11:00-12:00		Homepage address	www.ilhanchang.com	
Teaching Assistant	Name (title/division)					
	Office Room Number	대형지반공학실 협동	Office phone Number	2509	e-mail	kky950317@ajou.ac.kr

1. Introduction

In the "Geotechnical Engineering Design" course, students apply soil mechanics theories to actual problems with in-situ ground stability. This course, "Soil Mechanics (II)," is a continuation of the previous "Soil Mechanics," which was held in Year 3 Session 1. Geotechnical engineering structures are essential building components that resist ground loads or transfer the overburden structural load to the underlying ground. Students actively learn and comprehend how to apply geotechnical engineering knowledge to actual ground support system design while taking into account overall safety and economic feasibility. This course will cover following subjects for students active learning.

- The importance of reliable ground investigation (survey) for safe and economic feasible civil structure design.
- Slope stability theories and cases
- Earth pressure theories and cases
- Ground bearing capacity and shallow foundation basis
- Numerical Program Practices - Slope stability
- Numerical Program Practices - Retaining wall design
- Hands on Project - Reinforced soil wall design, fabrication, and assessment

2. Course Objectives

Course Learning Outcomes (CLO)

- CLO 1: 기후변화로 인해 증대되고 있는 비탈면 불안정 원인 및 해결책을 제시할 수 있다
- CLO 2: 토압의 위험성과 토압을 제어할 수 있는 방안을 제시할 수 있다.
- CLO 3: 상부하중이 지반 내로 전달 및 분산되는 원리를 이해할 수 있다.
- CLO 4: 지반공학 관련 주요 수치해석프로그램들에 대한 기본적인 이해가 가능하다.
- CLO 5: CLO1~CLO4를 통해 습득된 지식을 토대로 실제 지반지지구조물을 설계, 제작 및 평가할 수 있다.

3. Class types and activities

Modern knowledge on the shear strength of soil, earth pressure, slope stability, earth pressure, retaining walls, and shallow foundations will be taught through main lectures to improve students comprehension and practical applicability on real geotechnical engineering and foundation structures analysis and design (lecture venue: Room 310, Paldal Hall).

In order to enhance their understanding on geotechnical stability analysis and supporting system design, students will also learn how to use common numerical analysis and design programs (venue: Room 1024, Paldal Hall).

All lectures will be delivered via in class mode, but can vary if we face higher level of social distancing (e.g. COVID-19 restrictions) situations. All lectures will be delivered online (Zoom) when in-person instruction is prohibited.

Each student must activate their camera in order to verify their attendance (No exception). Joined students whose cameras are off will be deemed absent.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input checked="" type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

토질역학, 재료역학, 유체역학, 수리학

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	32	10%	In class attendance / For online lectures, students are asked to turn-on their cameras to validate her/his participation.
midterm exam	1회	25%	Scheduled in Week 8
final exam	1	40%	Final Term Project (Design/Fabrication 10% + Report 10% + Presentation 20%)
quiz			
presentation			
discussion			
homework	3	25%	Ordinary homework assignment: 1 time (7%) / Numerical simulation practice assignments: 2 times (9%, 9%)
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Fundamentals of Geotechnical Engineering. 5th Edition.	Braja M. Das, Nagaratnam Sivakugan	Cengage Learning	2017

10. Class system and Class shedule

지반공학설계에서는 주요 배경이론, 안정성 해석, 설계 적용 방법을 익히기 위하여 다음의 순서로 수업을 진행한다.

1. 지반공학설계 주요 배경 이론 강의
2. 지반공학 구조물들의 역학적 관점 및 설계 주안점 강의
3. 지반 안정성 향상을 위한 설계법 강의
4. 비탈면 안정성 해석 이론과 수치해석 프로그램 사용법
5. 토압의 원리와 관련 지반 지지구조물의 설계와 수치해석 프로그램 사용법

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Soil Mechanics Review – Particulate material / Permeability / Consolidation	K/E	장일한	강의		
2	Soil Mechanics Review – Shear strength of soil	K/E	장일한	강의		
3	Slope stability theories I (비탈면 안정성 이론 I)	K/E	장일한	강의		
4	Slope stability theories II (비탈면 안정성 이론 II)	K/E	장일한	강의 설계실습		
5	Lateral earth pressure (횡토압) – Rankines theory	K/E	장일한	강의		
6	Lateral earth pressure (횡토압) – Coulombs theory	K/E	장일한	강의		
7	Retaining wall design (옹벽 설계) + MSE retaining wall design (보강 토 옹벽 설계)	K/E	장일한	강의 설계실습	Homework assignment 1	
8	Midterm exam / Term Project Induction	K/E	장일한	시험	Midterm exam / In class	
9	Ground bearing capacity (지반 지지력)	K/E	장일한	강의		
10	Slope stability practice I (비탈면 안정성 실습 I)	K/E	장일한	강의		
11	Slope stability practice II (비탈면 안정성 실습 II)	K/E	장일한	강의	Homework assignment 2	
12	Geotechnical engineering support structures design practice I (지반 지지구조물 설계 및 해석 실습 I)	K/E	장일한	강의		
13	Geotechnical engineering support structures design practice II (지반 지지구조물 설계 및 해석 실습 II)	K/E	장일한	강의	Homework assignment 3	
14	Term Project design and practice I (프로젝트 설계 및 실습 I)	K/E	장일한	실습		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
15	Term Project design and practice II (프로젝트 설계 및 실습 II)	K/E	장일한	실습	Term project report submission	
16	Final Assessment – Project Presentation	K/E	장일한	발표	Term Project Presentation	

11. Other items of notification

Heat Prime Mover Engineering

Course Name	Course type (credit/hours)	전선(3/3)		Course code	B036
	Target students Division/major/grade	기계공학과/4학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(서305) 수A(서305)(서305)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses	열역학			
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	전용석			
	Office Room Number	동관 201호	Office phone Number	3299	e-mail
	Office hours	월수 10:15-11:45		Homepage address	terl.ajou.ac.kr
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Due to resource depletion and climate change issues on Earth, energy concerns have become one of the most critical challenges facing humanity today. This course focuses on efforts towards sustainable energy utilization worldwide, without environmental degradation. It covers fundamental principles of energy production systems, incorporating interdisciplinary content beyond mechanical engineering. Students will develop skills in understanding basic systems and applications of major power plants such as thermal, hydro, and nuclear power plants. Additionally, the course explores future-oriented topics in renewable energy sectors like solar power, solar heating, wind power, fuel cells, hydrogen energy, and bioenergy, addressing key technologies. Furthermore, based on thermodynamics and refrigeration principles, students will learn to design and compute energy systems using computer programs.

2. Course Objectives

Due to the depletion of Earth's resources and climate and environmental issues, energy issues are currently the most important issue facing humanity. Lectures will be given on the efforts of countries around the world to utilize sustainable energy without environmental destruction. In particular, the field of power generation systems through the basic principles of energy production includes not only mechanical engineering elements but also interdisciplinary content from various fields. Develop capabilities in basic systems and applications for representative power plants such as thermal, hydro, and nuclear power plants. In addition, it includes future-oriented content covering key technologies in the renewable energy field such as solar energy, solar energy, wind power, fuel cells, hydrogen energy, and bioenergy. In addition, students develop the ability to design and calculate energy systems through computer programs based on thermodynamics and refrigeration and air conditioning.

3. Class types and activities

Throughout the semester, the first 8 weeks of lectures will follow a format where class notes are uploaded weekly and presented in a traditional lecture style. The subsequent 8 weeks will focus on practical programming exercises. The midterm exam will be written, and the final exam will be practical..

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

열역학, 열전달 기초

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		40	
final exam		40	
quiz			
presentation			
discussion			
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	에너지 과학 4th (Energy science)	윤린 외	한티미디어	2023

10. Class system and Class shedule

강의를 통해 전체적인 에너지공학에 대해 학습하고 실습프로그램을 통해 추후 졸업 후 에너지공학 관련 업무 시 실무적인 도움이 될 수 있도록 함.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Concept of Energy	E	전용석			
2	Fossil Fuels and Nuclear Energy	E	전용석			
3	Renewable Energy (1)	E	전용석			
4	Renewable Energy (2)	E	전용석			
5	Energy Network (1)	E	전용석			
6	Energy Network (2)	E	전용석			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
7	Thermal Engineering and Energy	E	전용석			
8	Power & Refrigeration Cycle (1)	E	전용석			
9	Power & Refrigeration Cycle (2)	E	전용석			
10	Mid-term Exam.	E	전용석			
11	Energy Engineering Program Practice (1)	E	전용석			
12	Energy Engineering Program Practice (2)	E	전용석			
13	Energy Engineering Program Practice (3)	E	전용석			
14	Energy Engineering Program Practice (4)	E	전용석			
15	Energy Engineering Program Practice (5)	E	전용석			
16	Final Exam.	E	전용석			

11. Other items of notification

없음.

Human Resources Management

Course Name	Course type (credit/hours)	전선(3/3)			Course code	1033
	Target students Division/major/grade	경영학부/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(연암612) 수E(연암612)(연암612)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	Organizational Behavior				
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	최명원 (교수/경영대학 경영학과)				
	Office Room Number	다산관 529호	Office phone Number	3671	e-mail	
	Office hours	to be announced		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course introduces you to the field of Human Resource Management (HRM), a systematic study of the policies, practices, and systems that influence employees' attitudes and behaviors. The basic objective of this course is to help you understand the theories and practices of HRM. Upon completion of the course, you should be able to: (a) explain the key principles of HRM, (b) explain how HRM practices are designed, and (c) explain how HRM practices can be used to achieve organizational goals. Throughout the semester, you will learn the principles of HRM and their applications in organizational settings. Specific topics include recruitment, selection, training & development, performance management, compensation, and employee relations.

2. Course Objectives

The basic objective of this course is to help you understand the theories and practices of HRM. Upon completion of the course, you should be able to: (a) explain the key principles of HRM, (b) explain how HRM practices are designed, and (c) explain how HRM practices can be used to achieve organizational goals.

3. Class types and activities

The professor will deliver the lectures. Make sure to frequently check Ajou Blackboard (<http://eclass2.ajou.ac.kr>) both before and after class sessions for lecture notes and any announcements from the professor regarding assignments, exams, and other important information.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Students should understand the key concepts and theories of organizational behavior. Additionally, they must be able to read materials in English and comprehend the content delivered in English during the lectures.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Attendance
midterm exam	1	45%	Midterm Exam
final exam	1	45%	Final Exam
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Human Resource Management (13th edition)	R. A. Noe, J. R. Hollenbeck, B. Gerhart, P. M. Wright	McGraw-Hill Education	2022

10. Class system and Class shedule

Major topics include recruitment, selection, training & development, performance management, compensation, and employee relations.
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Overview	E	최명원			
2	Introduction to HRM	E	최명원			
3	HR Planning & Recruitment	E	최명원			
4	Selection & Placement	E	최명원			
5	Employee Separation & Retention	E	최명원			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Performance Management	E	최명원			
7	Performance Management (cont.)	E	최명원			
8	Midterm Exam	E	최명원			
9	Employee Training	E	최명원			
10	Employee Training (cont.)	E	최명원			
11	Employee Development	E	최명원			
12	Compensation	E	최명원			
13	Employee Benefits	E	최명원			
14	Employee Relations	E	최명원			
15	Global HRM	E	최명원			
16	Final Exam	E	최명원			

11. Other items of notification

IT Professional English

Course Name	Course type (credit/hours)	전선(3/3)			Course code	F083
	Target students Division/major/grade	소프트웨어학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(팔409) 수C(팔409)(팔409)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Joseph Ball (조교수/대학 다산학부대학)				
	Office Room Number	성호관421호	Office phone Number	2846	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

IT English is a course that concentrates on English with an Information Technology focus. Speaking lessons include pair work, small group tasks and class discussions. The language of instruction is in English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly for PPT activities.
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics.
- (4) Follow the steps in the IT Business Proposal

3. Class types and activities

Investigating New Technologies
CASE STUDY BASED ON IT BUSINESS
Presentation (PPT) ENGLISH

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input checked="" type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate material.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		15%	Attendance: Students are responsible for obtaining notes and completing assignments given on days they were absent. Furthermore, unexcused absences w
midterm exam			
final exam		30%	Individual IT Business Proposal: Students will complete a Written IT Bus. Proposal 15% and an Individual Power Point Presentations from Proposal: 15%
quiz			
presentation		10%	Daily Class Participation: Students are expected to speak English during class time. Students are expected to complete all in-class tasks. Students ar
discussion			
homework		45%	IT Form, Breakthrough Tech PPT, Infographic, Crisis Management Presentation, & Design a Car or Robot
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	Please have a laptop for every class.			

10. Class system and Class shedule

<p>We will simply follow the activities from the syllabus.</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Review of Syllabus Your Future IT Public Limited Company Exercise 5%		Joseph Ball	Online & Video		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	IT Breakthrough Technologies Exercise 10%		Joseph Ball	Online & Video		
3	IT Group Infographics Group Exercise 10%		Joseph Ball	Online & Video		
4	IT Group Infographics Group Exercise 10%		Joseph Ball	Online & Video		
5	IT Group Infographics Group Exercise 10%		Joseph Ball	Online & Video		
6	IT Crisis Management Group Exercise 10%		Joseph Ball	Online & Video		
7	IT Crisis Management Group Exercise 10%		Joseph Ball	Online & Video		
8	IT Crisis Management Group Exercise 10%		Joseph Ball	Online & Video		
9	IT Crisis Management Group Exercise 10%		Joseph Ball	Online & Video		
10	Review for Individual IT Business Proposals and PPT Creating an IT Business Proposal		Joseph Ball	Online & Video		
11	Review for Individual IT Business Proposals and PPT Creating an IT Business Proposal		Joseph Ball	Online & Video		
12	Review for Individual IT Business Proposals and PPT Creating an IT Business Proposal		Joseph Ball	Online & Video		
13	Guidelines for Individual IT Product Business Proposal PPT Design a Car Group Exercise 10%		Joseph Ball	Online & Video		
14	Management Styles CEO Traits Guidelines		Joseph Ball	Online & Video		
15	Due Individual IT Business Proposal 15%		Joseph Ball	Online & Video		
16	IT Business Power Point Presentations 15%		Joseph Ball	Online & Video		
17	IT Business Power Point Presentations 15%		Joseph Ball	Online & Video		

11. Other items of notification

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Immunology

Course Name	Course type (credit/hours)	전선(3/3)		Course code	G081
	Target students Division/major/grade	생명과학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(성 133) 금D(성 133)(성 133)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Cell biology, Molecular biology			
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	이재우			
	Office Room Number		Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course is designed to help students to better understand basic concepts of immuno-biology. It will cover broad topics in immunology as enlisted below.

1. Introduction to Immunology
2. Innate immunity
3. The recognition of antigen by T and B cells
4. The generation of lymphocyte antigen receptors
5. Antigen presentation to T cells
6. Lymphocyte receptor signaling
7. T cell development and homeostasis
8. B cell development
9. Adaptive immune responses
 - a. T cell-mediated responses (T cell differentiation)
 - b. Tissue specific T cell differentiation
 - c. The humoral immune response
10. New cell types (ILC, NKT cells, novel antigen-presenting cells)
11. Infection and immunity
12. The mucosal immune system (microbiota and diet)
13. Allergy and allergic diseases
14. Autoimmunity and transplantation
15. Manipulation of the Immune response

2. Course Objectives

3. Class types and activities

1. We will study basic concepts of innate and adaptive immune system
2. We will go through several important of breakthroughs in immunology

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	
midterm exam	1	45	
final exam	1	45	
quiz			
presentation			
discussion		5	
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	The immune system 5th edition	Peter Parham	W. W. Norton & Company	2021

10. Class system and Class shedule

해당과목을 이해하는데 필수적인 컨셉 위주의 강의를 하고, 그와 관련된 최근 연구 동향을 소개할 계획입니다. 최근 연구 동향을 소개할때는 학생들의 토론 참여를 적극 장려할 계획입니다.

면역학은 복잡하고 다양하며 빠르게 진보하고 있는 학문입니다. 내용이 복잡하기에 기본적인 개념 이해가 중요합니다. 강의식 수업이고 영어 강의라 제한적이겠지만, 최근 연구 동향에 대한 생각을 나누고 토론하는 것을 장려함을 통해 살아 움직이는 면역학에 대한 흥미를 고취하고자 합니다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Elements of the Immune System and Their Roles in Defense	E	이재우			
2	Innate Immunity: The Immediate Response to Infection	E	이재우			
3	Innate Immunity: The Induced Response to Infection	E	이재우			
4	Antibody Structure and the Generation of B-Cell Diversity	E	이재우			
5	Antigen Recognition by T Lymphocytes	E	이재우			
6	The Development of B Lymphocytes	E	이재우			
7	The Development of T Lymphocytes	E	이재우			
8	T Cell-Mediated Immunity	E	이재우			
9	Immunity Mediated by B Cells and Antibodies	E	이재우			
10	Preventing Infection at Mucosal Surfaces	E	이재우			
11	Immunological Memory and Vaccination	E	이재우			
12	Coevolution of Innate and Adaptive Immunity	E	이재우			
13	Failures of the Bodys Defenses	E	이재우			
14	IgE-Mediated Immunity and Allergy	E	이재우			
15	Transplantation of Tissues and Organs	E	이재우			
16	Disruption of Healthy Tissue by the Adaptive Immune Response	E	이재우			

11. Other items of notification

Industrial Relations

Course Name	Course type (credit/hours)	전선(3/3)			Course code	1060
	Target students Division/major/grade	경영학부/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(다310) 목D(다310)(다310)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	정대용 (교수/경영대학 경영학과)				
	Office Room Number	다산관 424	Office phone Number	2840	e-mail	
	Office hours	1pm-2:30pm, Tue.		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number	509 Dasan Hall	Office phone Number	010-7383-4537	e-mail	ich45337@hanmail.net

1. Introduction

Industrial relations (IR) is the interdisciplinary field of study that concentrates on workers and their unions (and associations), employers and their organizations, government, and the environment in which these “actors” interact. This course explores the components and dynamics of IR systems and how the IR actors use rule-making processes to establish terms and conditions of employment in their environmental settings. A secondary emphasis is on international comparisons to enhance understanding of the unique qualities of the Korean IR system and an appreciation for international variations. The course utilizes an interdisciplinary approach, drawing on theories and concepts from economics, psychology, sociology, labor law, and other behavioral sciences.

2. Course Objectives

3. Class types and activities

1. We hold live online classes in Zoom due to the COVID-19 situation (A couple offline classes could be held if necessary). You must have a camera & a microphone in your computer and turn them on during class to show your face/upper body (no mask/no hat) and participate in discussions effectively. Two offline exams will be given.

2. I do not use a spoon-feeding teaching style. Learning in my class is based on collective action (discussion-bases class), and all activities in class will be conducted in English only, You are required to complete the readings prior to each class, contribute to the discussion of the material, and ask questions when you do not understand. You will learn from your classmates and help them learn. As an instructor, I am here to facilitate your mutual teaching and learning, not to give you "the answers." Active participation in discussions is expected, and your participation will be evaluated. As such, you should have an appropriate level of English skills and willingness to participate in class activities.

WARNING: If you are uncomfortable or unwilling to participate and contribute to a joint-learning environment, you should consider taking another course (or taking this course with another instructor).

4. Teaching Method

lecture

discussion and debate

team project(presentation and case studies)

experiments(role-playing,etc)

designing and production

on-site learning(on-site training)

others

5. Support Systems in Use

e-class

automatic recording system

web-based assignment

cyber lecture

blended learning(combination of online and offline teaching)

class behavior analyzing system

others

6. Teaching Tools

PBL(Problem Based Learning)

CBL(Case Based Learning)

TBL(Team Based Learning)

others

7. Knowledge and ability required for taking this course

1. College-level English skills.
 2. Willingness to participate in class activities.

NOTE: all activities in class will be conducted in English only.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam	1	35%	Short essay questions.
final exam	1	35%	Short essay questions.
quiz		10%	Pop-quizzes (unannounced) will be given several times throughout the semester.
presentation			
discussion			
homework			
etc		20%	Participation in class activities
study hours	3-7 hours depending on your abilities		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Course pack (Various Articles)	Authors	Publishers	0000
Main	An Introduction to U.S. Collective Bargaining and Labor Relations	Harry C. Katz, Thomas A. Kochan, and Alexander J. S. Colvin	Cornell University Press	2017

10. Class system and Class shedule

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to the field of IR	E	정대용			
2	Classical Theories: Adam Smith & Karl Marx	E	정대용			
3	Institutionalist View & System Approach	E	정대용			
4	Korean IR I	E	정대용			
5	Korean IR II	E	정대용			
6	Environment, the State & Labor Laws	E	정대용			
7	Union Strategies & Structures	E	정대용			
8	Mid-term Exam (Offline)	E	정대용			
9	Management Strategies & Structures	E	정대용			
10	Union Organizing & Bargaining Structures I	E	정대용			
11	Union Organizing & Bargaining Structures II	E	정대용			
12	Negotiation Process & Strikes	E	정대용			
13	Participatory Processes	E	정대용			
14	International & Comparative IR: Germany	E	정대용			
15	International & Comparative IR: Japan	E	정대용			
16	Exam Review & Final Exam (Offline)	E	정대용			

11. Other items of notification

1. My course does not fit those students whose main goal is to get a "good grade." It better fits those who enjoy the process of learning.
2. This course is offered for upper-level undergraduate (third & fourth year) students, and its content is complex. You should take another course if you are looking for an "easy course."
3. If you already took this course with me before, you are not allowed to retake this course with me. It would be more beneficial for you to retake this course with another prof.

Intelligent Robotics

Course Name	Course type (credit/hours)	전선(3/3)		Course code	B018
	Target students Division/major/grade	기계공학부/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수B(서307) 금B(서307)(서307)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	동역학, 기구설계			
	Related basic courses				
	Recommmaded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	김의겸 (조교수/공과대학 기계공학과)			
	Office Room Number	팔달관 715호	Office phone Number	2341	e-mail
	Office hours		Homepage address	https://iir.ajou.ac.kr/	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

1. Goal: To understand the overall robotic systems, learn the basics of robot mechanism, kinematics, and motion control, and to increase the ability to develop robotic systems.
2. Contents: Introduce the main components of robotic systems and various types of the systems to increase the understanding of robot, and learn how to complete the mathematical modeling of robot by learning the robot kinematics and motion control. Also, learn how to use Simulation S/W and help understand the contents learned through practice using it.

2. Course Objectives

◇ Goal

- To understand the overall robotic systems, learn the basics of robot mechanism, kinematics, and motion control, and to increase the ability to develop robotic systems.

◇ Outcomes

- ① Ability to understand and explain the operation principle of a robot by applying knowledge of mathematics, basic science, and engineering technology
- ② Ability to design practically applicable process applications in consideration of robot functions and performance
- ③ Kinematic modeling and derivation of kinematics equations for various types of robots
- ④ Ability to design robot processes and robot simulation S/W

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input checked="" type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

- Basic mathematical knowledge, method of expressing position/direction of objects and their coordinate transformation method, kinematics
- MATLAB

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam	1	30%	
final exam	1	40%	
quiz			
presentation			
discussion			
homework	6	20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	Introduction to Robotics	John Craig		
Main	로봇 공학 (강의 노트)	김의겸		

10. Class system and Class shedule

<p>Fundamentals of robotics</p> <ul style="list-style-type: none"> - Degree-of-freedom of robots - Various robotic systems and components - Recent robot technologies <p>Mathematical modeling of robot manipulators</p> <ul style="list-style-type: none"> - Spatial descriptions - Mechanism - Kinematics -> control - Jacobian & trajectory planning - with Matlab (Robotics toolbox)

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Ch. 1. Introduction to robotics		김의겸	멀티미디어 활용 강의		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Ch. 2. Fundamentals of robotics		김의겸	멀티미디어 활용 강의		
3	Ch. 3. Components for robotic systems		김의겸	멀티미디어 활용 강의		
4	Ch.3. Components for robotic systems		김의겸	멀티미디어 활용 강의		
5	Ch. 3. Components for robotic systems		김의겸	멀티미디어 활용 강의		
6	Ch. 4. Spatial descriptions (2D), 3D		김의겸	멀티미디어 활용 강의		
7	Ch. 4. Spatial descriptions (2D), 3D		김의겸	멀티미디어 활용 강의		
8	Midterm		김의겸	중간고사		
9	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
10	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
11	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
12	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
13	Ch. 6. Trajectory planning		김의겸	멀티미디어 활용 강의		
14	Ch. 7. Jacobian, Incremental Kinematics		김의겸	멀티미디어 활용 강의		
15	Summary		김의겸	멀티미디어 활용 강의		
16	Final exam		김의겸	기말고사		

11. Other items of notification

In case of change, please check the notice through Ajou BB

Intelligent Robotics

Course Name	Course type (credit/hours)	전선(3/3)		Course code	B019
	Target students Division/major/grade	기계공학부/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(서307) 금D(서307)(서307)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	동역학, 기구설계			
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	김의겸 (조교수/공과대학 기계공학과)			
	Office Room Number	팔달관 715호	Office phone Number	2341	e-mail
	Office hours		Homepage address	https://iir.ajou.ac.kr/	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

1. Goal: To understand the overall robotic systems, learn the basics of robot mechanism, kinematics, and motion control, and to increase the ability to develop robotic systems.
2. Contents: Introduce the main components of robotic systems and various types of the systems to increase the understanding of robot, and learn how to complete the mathematical modeling of robot by learning the robot kinematics and motion control. Also, learn how to use Simulation S/W and help understand the contents learned through practice using it.

2. Course Objectives

◇ Goal

- To understand the overall robotic systems, learn the basics of robot mechanism, kinematics, and motion control, and to increase the ability to develop robotic systems.

◇ Outcomes

- ① Ability to understand and explain the operation principle of a robot by applying knowledge of mathematics, basic science, and engineering technology
- ② Ability to design practically applicable process applications in consideration of robot functions and performance
- ③ Kinematic modeling and derivation of kinematics equations for various types of robots
- ④ Ability to design robot processes and robot simulation S/W

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input checked="" type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

- Basic mathematical knowledge, method of expressing position/direction of objects and their coordinate transformation method, kinematics
- MATLAB

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam	1	30%	
final exam	1	40%	
quiz			
presentation			
discussion			
homework	6	20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	Introduction to Robotics	John Craig		
Main	로봇 공학 (강의 노트)	김의겸		

10. Class system and Class shedule

<p>Fundamentals of robotics</p> <ul style="list-style-type: none"> - Degree-of-freedom of robots - Various robotic systems and components - Recent robot technologies <p>Mathematical modeling of robot manipulators</p> <ul style="list-style-type: none"> - Spatial descriptions - Mechanism - Kinematics -> control - Jacobian & trajectory planning - with Matlab (Robotics toolbox)

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Ch. 1. Introduction to robotics		김의겸	멀티미디어 활용 강의		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Ch. 2. Fundamentals of robotics		김의겸	멀티미디어 활용 강의		
3	Ch. 3. Components for robotic systems		김의겸	멀티미디어 활용 강의		
4	Ch.3. Components for robotic systems		김의겸	멀티미디어 활용 강의		
5	Ch. 3. Components for robotic systems		김의겸	멀티미디어 활용 강의		
6	Ch. 4. Spatial descriptions (2D), 3D		김의겸	멀티미디어 활용 강의		
7	Ch. 4. Spatial descriptions (2D), 3D		김의겸	멀티미디어 활용 강의		
8	Midterm		김의겸	중간고사		
9	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
10	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
11	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
12	Ch. 5. Robot manipulator kinematics		김의겸	멀티미디어 활용 강의		
13	Ch. 6. Trajectory planning		김의겸	멀티미디어 활용 강의		
14	Ch. 7. Jacobian, Incremental Kinematics		김의겸	멀티미디어 활용 강의		
15	Summary		김의겸	멀티미디어 활용 강의		
16	Final exam		김의겸	기말고사		

11. Other items of notification

In case of change, please check the notice through Ajou BB

Introduction to Brain Science

Course Name	Course type (credit/hours)	전선(3/3)			Course code	G082
	Target students Division/major/grade	생명과학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화A(성 133) 금A(성 133)(성 133)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	없음				
	Related basic courses	생물학1, 생물학2				
	Recommmended concurrent courses	없음				
	Related advanced courses	신경생물학				
Instructor	Name (title/division)	허지연 (조교수/자연과학대학 생명과학과)				
	Office Room Number	원천관 205호	Office phone Number	2548	e-mail	
	Office hours	화 2-4pm		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course introduces the field of brain science. Following the 'Neurobiology' course in the spring semester, 'Introduction to Brain Science' covers a general introduction to brain science and its related brain disorders in depth. Moreover, students will learn about the causes, the cellular and molecular mechanisms, and the possible treatment methods of brain disorders. By understanding the etiology of brain disorders, students will also learn the importance of the structures and functions of the human brain.

2. Course Objectives

- 1.To learn about a basic principle that governs the nervous system of our body
- 2.To learn about the structure-function relationship of the nervous system
- 3.To learn about molecular mechanisms in neuroscience

3. Class types and activities

This course introduces the field of brain science, and its related and most representative disorders. By understanding the causes of brain disorders, students could understand the structures and functions of the human brain. Students will be evaluated by a presentation, a mid-term exam, and a final exam.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Knowledge about Biology 1 and 2 is required.
Knowledge about neurobiology is preferred but not required.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	16	10%	Full attendance (10 points), Each absence will be deducted by 1 point. Cheating in attendance will get 0. Eight times or more absences will get F.
midterm exam	1	35%	
final exam	1	35%	
quiz			
presentation	1	20%	
discussion			
homework			
etc			
study hours	4시간/주		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Neuroscience-Exploring the Brain 4e(IE)	Mark F. Bear / Barry W. Connors / Michael A. Paradiso	바이오메디북	2015
Ref.	Principles of Neurobiology	Liqun Luo	Garland Science	2020
Ref.	Research papers			

10. Class system and Class shedule

1. This lecture will cover the general principles of brain science and its related disorders.
2. Each student will give a presentation based on a selected topic.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction, Introduction to Brain Science	E	허지연	강의		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Introduction to Brain Science	E	허지연	강의		
3	Alzheimers disease	E	허지연	강의		
4	Parkinsons disease	E	허지연	강의		
5	Huntingtons disease	E	허지연	강의		
6	ALS	E	허지연	강의		
7	Stroke	E	허지연	강의		
8	Midterm exam	E	허지연	중간고사		
9	Infection in CNS	E	허지연	강의		
10	Neurodevelopmental disorder	E	허지연	강의		
11	Psychiatric disorder I	E	허지연	강의		
12	Psychiatric disorder II	E	허지연	강의		
13	Psychiatric disorder III	E	허지연	강의		
14	Presentation	E	허지연	발표		
15	Presentation	E	허지연	발표		
16	Final exam	E	허지연	기말고사		

11. Other items of notification

Introduction to Financial machine learning

Course Name	Course type (credit/hours)	전선(3/3)			Course code	1075
	Target students Division/major/grade	금융공학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화E(다311) 금E(다311)(다311)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses	금융 선형대수, 통계				
	Recommanded concurrent courses					
	Related advanced courses	금융딥러닝기초				
Instructor	Name (title/division)	민찬호 (조교수/경영대학 금융공학과)				
	Office Room Number	다산관 505-1호	Office phone Number	3668	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This lecturcs consists of basic theory and practice of machine learning. The topics we will cover includes, supervised and unsupervised learning and reinforcement learning.

2. Course Objectives

[교육목표]

기계학습의 기본 개념과 관련 알고리즘 전반에 대한 학습을 통해 주어진 데이터를 효율적으로 활용하여 의사 결정에 활용할 수 있는 능력을 배양한다.

[학습성과]

- 1) 기계학습 분야의 각 기본 주제 개념 및 알고리즘 동작 방식을 이해한다.
- 2) 주어진 데이터에 관련한 관련 문제를 도출할 수 있다.
- 3) 데이터 및 도출된 문제에 대한 적절한 기법을 적용, 평가를 통해 최적 기법을 선택할 수 있다.
- 4) 팀 기반 설계 프로젝트를 구체화하여 적절한 팀웍을 통해 진행할 수 있다.

3. Class types and activities

This course have two main parts: theory and application. In theory part we will study the underlying concept and knowledge of machine learning technique. In application, we will make use of python library to handle financial data with machine learning algorithm

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	수업 참여도 평가
midterm exam		30%	
final exam		30%	
quiz			
presentation			
discussion			
homework		30%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Lecture slide			
Ref.	Python machine learning:: Machine Learning and Deep Learning with Python, scikit-learn, and TensorFlow 2, Third Edition	Sebastian Raschka, Vahid Mirjalili	Packt	
Ref.	밑바닥부터 시작하는 딥러닝(Deep learning from scratch)	사이토 고키	한빛미디어/O'Reilly	

10. Class system and Class shedule

Supervised learning Deep neural network Unsupervised learning Reinforcement learning

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction	K	민찬호			
2	Classification and Regression	K	민찬호			
3	Classification and Regression	K	민찬호			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Classification and Regression	K	민찬호			
5	Neural Network	K	민찬호			
6	Neural Network	K	민찬호			
7	Neural Network	K	민찬호			
8	Mid-term	K	민찬호			
9	RL	K	민찬호	프로젝트 제안발표		
10	RL	K	민찬호			
11	Clustering	K	민찬호			
12	Dimensionality reduction	K	민찬호			
13	Random Tree	K	민찬호			
14	Random Forest	K	민찬호			
15	other method	K	민찬호	프로젝트 최종발표		
16	Final	K	민찬호			

11. Other items of notification

없음

Introduction to International Relations

Course Name	Course type (credit/hours)	전필(3/3)			Course code	K095
	Target students Division/major/grade	정치외교학과/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(을358-1) 수C(을358-1)(을358-1)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김명철 (조교수/사회과학대학 정치외교학과)				
	Office Room Number	을곡관512	Office phone Number	2744	e-mail	
	Office hours	TBA and by appointment		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course is an introduction to the study of international relations. The purpose of the course is to provide a theoretical and historical basis for analyzing and understanding international relations. The major topics of this course are interstate war, international political economy, human right practices, and other current global conflicts including terrorism, environmental degradation, and nuclear proliferation. We will discuss the nature of the international system, the causes of international conflicts and the difficulties faced by states as well as non-state actors in establishing cooperation and resolving conflicts. We will also consider political dimensions of the international trade, financial, and monetary relations.

2. Course Objectives

The course will prepare you for more advanced classes in international relations. And it will also help you develop analytical skills to understand current world events.

3. Class types and activities

Lecture and Discussion

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5%	
midterm exam		30%	
final exam		40%	
quiz			
presentation			
discussion		10%	
homework		15%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World Politics: Interests, Interactions, Institutions	Jeffry A. Frieden, David A. Lake, and Kenneth A. Schultz	W. W. Norton	2018
Sub	All other readings will be posted on the Ajou Bb			

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction: Understanding International Relations	E	김명철			Friden, Lake, Schultz (Hereafter, FLS) Introduction

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	History and Theory	E	김명철			FLS Chp. 1; Stephen Walt; Jack Snyder
3	Analytical Models (Approaches)	E	김명철			FLS Chp. 2; Alex Wendt
4	War at the Systemic Level	E	김명철			FLS Chp. 3; Mearsheimer and Walt
5	Domestic Politics and War	E	김명철			FLS, Chp. 4
6	International Institutions and War	E	김명철			FLS, Chp. 5
7	International Trade	E	김명철			
8	Midterm Exam	E	김명철			
9	International Financial Relations	E	김명철			
10	International Monetary Relations	E	김명철			
11	Development and the Global Commons	E	김명철			
12	Transnational Advocacy Groups	E	김명철			
13	International Law, Norms and Human Rights	E	김명철			
14	Terrorism and New Security Threat	E	김명철			
15	Nuclear Proliferation and the Rise of New Global Rivalry	E	김명철			
16	Final Exam	E	김명철			

11. Other items of notification

Korean Studies 1

Course Name	Course type (credit/hours)	교선(3/3)			Course code	X092
	Target students Division/major/grade	/			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화A(연암105) 금A(연암105)(연암105)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Scott Scattergood (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	1824	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Korean Culture from an International Perspective

This course will primarily focus on aspects of Korean culture that can be helpful to understanding life in Korea, especially, but not exclusively, from the perspective of people who grew up in different cultures. There will be many instances of comparing aspects of various cultures. Students will be expected to explore and try to explain things about cultures they are familiar with. There will be some exploration of pop culture, food culture, and other aspects of daily life. There will also be an inevitable exploration of certain facets of history.

2. Course Objectives

3. Class types and activities

There will be many instances of the professor introducing and explaining ideas and concepts, and there will also be a lot of student-led discussions in small groups, so that students can hone their own understanding.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

This class will be held entirely in English, so an appropriate ability in English is required.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		15	Attendance: Students are responsible for material covered on days that they missed
midterm exam		15	Midterm Exam
final exam		15	Final Exam
quiz			
presentation		20	Presentations
discussion		25	Daily Class Participation: pairs, small groups, and whole class – speak in English, ask and answer questions
homework		10	Essay and other homework
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	Class material will be distributed through Blackboard			

10. Class system and Class shedule

This course will involve presentation and discussion of a wide variety of cultural phenomena. There will be discussion of general aspects of intercultural communication and cultural classifications, while most of the classes will involve discussion of specific aspects of Korean culture and how they compare to other cultures. Students will often provide the class with insights into their own cultures, in small-group and whole-class discussions, as well as in a presentation and an essay. The topics will include language, food and drink, popular culture, holidays and ceremonies, historical influences, and others.

To get a solid beginning of an understanding of Korean culture, each aspect of culture that we discuss will include a discussion of the origins or history of that aspect. This will lead us to learn about the four major periods of the last 2000 years of Korean history, and each period's lasting influence on the people of Korea. Also, the past 100 years of Korean history has been a time of possibly unprecedented change, as Korea has passed from being a rural, feudal monarchy to a colonized land, to an impoverished land devastated by civil war, to an economic miracle, to an international leader in technology and pop culture. The survival and change of various cultural aspects through this time period will be a major point of emphasis in this class. We will go into some detail about the current state of food, music, and interpersonal communication and other human behavior, as well as many other aspects of culture, but we will also consider the origins and changes of each of those things.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Class and Student introduction; Culture Shock	E	Scott Scattergood			
2	Dimensions of Culture: History	E	Scott Scattergood			
3	Dimensions of Culture	E	Scott Scattergood			
4	Dimensions of Culture	E	Scott Scattergood			
5	Folklore and Myths	E	Scott Scattergood			
6	Stereotypes; Misunderstandings	E	Scott Scattergood			
7	Presentations	E	Scott Scattergood			
8	Midterm Exam	E	Scott Scattergood			
9	Music; Food	E	Scott Scattergood			
10	Other Cultural Measures	E	Scott Scattergood			
11	Other Cultural Measures	E	Scott Scattergood			
12	Movies and Television	E	Scott Scattergood			
13	Business Culture	E	Scott Scattergood			
14	Education	E	Scott Scattergood			
15	Presentations	E	Scott Scattergood			
16	Final Exams	E	Scott Scattergood			

11. Other items of notification

The order of items covered in the "Progress Plan" / Syllabus is subject to change and addition.

Leadership and Entrepreneurship

Course Name	Course type (credit/hours)	전선(3/3)			Course code	1057
	Target students Division/major/grade	/			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(다310) 수E(다310)(다310)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김도영 (교수/경영대학 경영학과)				
	Office Room Number	다522	Office phone Number	2914	e-mail	
	Office hours				Homepage address	
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This is an English Class. 본 과목은 영어강의로 진행 될 것 입니다.

This course examines the theories and models of leadership and followership. Environmental factors, organizational objectives, company culture, and individual and group ethical standards will be examined to incorporate situational determinants of leadership effectiveness.

This course will provide a new framework on what “leadership” entails, along with developing an understanding for the skills and knowledge to how best address leadership opportunities now and in the future. Students’ ability to understand and apply diverse approaches to the leadership in organizations is emphasized by readings and case analyses of pertinent management materials. The emphasis is on building a sound grasp of good practice, and on developing the ability to apply such knowledge to actual business problems.

2. Course Objectives

- Define leadership, describe the role of genetics and development on individual leadership capability and be able to identify popular distinctions in the differences between leaders versus managers. ?
- Assess the state of current leadership capacity within organizations and suggest how a leadership needs analysis can support and enhance organizational effectiveness.
- Demonstrate leadership skills through participation in experiential exercises. ? Assess personal values, beliefs and ethical standards to enhance self-awareness in regard to personal leadership behaviors and reactions to leadership behaviors of others. ? Identify how leading a team is different from leading a group of individuals. ? Identify special challenges involved in leading geographically dispersed (virtual) teams. ? Describe the role of culture in determining effective leadership perceptions and outcomes. ? Understand leadership at the Personal, Interpersonal, Team and Organizational levels (PITO) and the array of leader-follower-situation (LFS) variables that influence the leadership process

3. Class types and activities

Course materials organized by the professor ?
 Case submissions ?
 Team experiential exercises and assignments ?
 Exams

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam	1	25	
final exam	1	35	
quiz			
presentation			
discussion		15	
homework			
etc	팀프로젝트	25	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	To be determined			

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction	K	김도영			
2	Trait Approach	K	김도영			
3	Behavioral Approach	K	김도영			
4	Situational Approach	K	김도영			
5	Path-Goal Theory	K	김도영			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Leader-Member Exchange Theory	K	김도영			
7	Transformational Leadership	K	김도영			
8	중간고사	K	김도영			
9	Authentic Leadership	K	김도영			
10	Servant Leadership	K	김도영			
11	Leadership Ethics	K	김도영			
12	Team Leadership	K	김도영			
13	Gender and Leadership	K	김도영			
14	Culture and Leadership	K	김도영			
15	Review	K	김도영			
16	기말고사	K	김도영			

11. Other items of notification

Management Information Systems

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	I 105
	Target students Division/major/grade	/		Opening semester	2024 2ND SEMESTER
	Class time and classroom	목10(다B108) 목11(다B108) 목12(다B108)(다B108)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	Ofori Henry (강사/경영대학 e-비즈니스학과)			
	Office Room Number	Office phone Number	e-mail		
	Office hours	Homepage address			
Teaching Assistant	Name (title/division)				
	Office Room Number	Office phone Number	e-mail		

1. Introduction

This course is designed to familiarize students with the fundamental concepts and principles of information systems (IS). It also provides a broad overview and a perspective on the essential topics in Management Information Systems (MIS). It targets undergraduate students with little or no background in IS. Therefore, it focuses on the breadth of coverage rather than the depth in any specific area. The topics that will be covered include the followings: Foundation Concepts, Information Technologies, Business Applications, Development Processes, and Management Challenges.

2. Course Objectives

3. Class types and activities

In general, offline (face-to-face) lectures will be conducted. However, it may depend on the pandemic or other uncontrollable situations.

Prof. will always keep students posted. In addition, the class consists of 60% theory lecture and 40 % practice via Real World case study discussion and presentation.

The lecture will be undertaken by the Professor and Real-World Case (#RWC) Discussion led by the Professor (students active participation is critical for a successful case discussion!) Supplementary Lecture or Discussion about current IT/IS-related issues.

The lecture provides a broad overview and a perspective on the essential topics in Management Information Systems (MIS), focusing on the breadth of coverage rather than the depth in any specific area. The topics that will be covered include the followings: Foundation Concepts, Information Technologies, Business Applications, Development Processes, and Management Challenges.

4. Teaching Method

lecture

discussion and debate

team project(presentation and case studies)

experiments(role-playing,etc)

designing and production

on-site learning(on-site training)

others

5. Support Systems in Use

e-class

automatic recording system

web-based assignment

cyber lecture

blended learning(combination of online and offline teaching)

class behavior analyzing system

others

6. Teaching Tools

PBL(Problem Based Learning)

CBL(Case Based Learning)

TBL(Team Based Learning)

others

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Students are allowed up to 2 absences and get penalty points from the 3rd absence.
midterm exam	1	30	- T/F, Multiple-choice, Fill-in-the-blank, and Short-answer type questions
final exam	1	30	- T/F, Multiple-choice, Fill-in-the-blank, and Short-answer type questions
quiz			
presentation	8	20	Real World Case presentation and discussion Details will be announced later.
discussion			
homework			
etc		10	Active participation (including activities in class and on the blackboard) of the students is critical for learning.- Students are expected to arrive on time and not to leave without permission during the class.- Note that academic misconduct such as cheating and copying will not be tolerated.
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	Management information systems : managing the digital firm?(Seventeenth).	Kenneth C. Laudon & Jane P. Laudon	Pearson	2021

10. Class system and Class shedule

The purpose of this course is to provide an introduction to Management Information Systems (MIS). In todays fast-changing business environment, Information Systems (IS) have become a key component in accomplishing strategic and operational goals in organizations. Students are required to understand how the company utilizes ISs to revitalize business processes, improve business decision-making, and gain a competitive advantage in the business world. The lecture has four parts. The first part will cover organizations, management, and the networked enterprise. The second part will introduce students to information technology infrastructure. The third and fourth parts will introduce students to key system applications for the digital age and building and managing systems, respectively.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction and Syllabus and Ch1. Information Systems in Global Business Today	E	Ofori Henry			Students are advised to read lecture PPT and Text book before class
2	Ch2. Global E-Business and Collaboration	E	Ofori Henry			Students are advised to read lecture PPT and Text book before class
3	Ch3. Information Systems, Organizations, and Strategy	E	Ofori Henry			Students are advised to read lecture PPT and Text book before class
4	Ch4. Ethical and Social Issues in Information Systems	E	Ofori Henry			Students are advised to read lecture PPT and Text book before class
5	Ch5. IT Infrastructure and Emerging Technologies	E	Ofori Henry			Students are advised to read lecture PPT and Text book before class
6	Ch6. Foundations of Business Intelligence:Database and Information Management	E	Ofori Henry			Students are advised to read lecture PPT and Text book before class

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
7	Ch7. Telecommunications, the Internet, and Wireless Technology	E	Ofori Henry			Students are adviced to read lecture PPT and Text book before class
8	Midterm Exam	E	Ofori Henry			
9	Ch8. Securing Information Systems	E	Ofori Henry			Students are adviced to read lecture PPT and Text book before class
10	Ch9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications	E	Ofori Henry			Students are adviced to read lecture PPT and Text book before class
11	Ch10. E-Commerce: Digital Markets, Digital Goods	E	Ofori Henry			Students are adviced to read lecture PPT and Text book before class
12	Ch11. Managing Knowledge and Artificial Intelligence	E	Ofori Henry			Students are adviced to read lecture PPT and Text book before class
13	Ch12. Enhancing Decision Making	E	Ofori Henry			Students are adviced to read lecture PPT and Text book before class
14	Ch 13. Building information system	E	Ofori Henry			Students are adviced to read lecture PPT and Text book before class
15	Lecture Review	E	Ofori Henry			
16	Final Exam	E	Ofori Henry			

11. Other items of notification

This syllabus is tentative and is subject to change at the discretion of the Lecturer

Marketing Management

Course Name	Course type (credit/hours)	전필(3/3)			Course code	1053
	Target students Division/major/grade	경영학과/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(다311) 목D(다311)(다311)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	이승환 (부교수/경영대학 경영학과)				
	Office Room Number	다산관 525	Office phone Number	2724	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Introduction to the Marketing business function. The purpose of the course is to develop an understanding of how companies use basic marketing frameworks to create value for their stakeholders (e.g., customers, shareholders, and employees). Key marketing concepts and terminology will be presented, enabling you to better understand how marketing decisions are implemented in practice.

2. Course Objectives

be able to define and use common marketing terms in business discussions
 ? have a command of fundamental marketing principles and be able to give examples of how to apply them in business situations
 ? gain an appreciation for the philosophy and process of marketing, and the impact it has on business, society and life in general
 ? be able to analyze how customers make purchase decision and understand how marketing strategies and tactics influence consumer behavior
 ? understand how marketing managers use an integrated marketing mix (Products, Pricing, Place, and Promotions) and manage the resources of the firm to create value and serve customers

3. Class types and activities

Traditional Lecture, Discussions & Team Projects(Presentations required)

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Fluency in English writing/speaking/reading is required

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		25%	
final exam		25%	
quiz			
presentation		30%	팀 프로젝트 전체 포함 / Team Project Overall
discussion			
homework		10%	
etc		10%	수업 및 토론 참여 / Class Participation
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	MKTG	Lamb, Hair, McDaniel	Cengage Learning	
Main	Principles of Marketing	Philip Kotler, Gary Armstrong	Pearson	

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Intro to Marketing		이승환			
3	ETHICS & CSR		이승환			
4	Consumer Behavior		이승환			
6	STP: Segmentation, Targeting, Positioning		이승환			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
8	Market Research		이승환			
13	4Ps (Product, Place, Promotion, Price)		이승환			
15	Team Project Presentations		이승환			

11. Other items of notification

A few selected course evaluation comments from past students are selected to help you understand this course.

"교수님께서 영어를 알아듣기 쉽게 또박또박 말씀해주셔서 좋았습니다. 과제물 평가가 특히 수업의 개념을 응용하여 실습하는 개념이라 좋았습니다."

"교수님께서 강의 중 이론 이외에도 다양한 관련 마케팅 사례를 보여주셔서 마케팅이 더욱 흥미롭게 느껴졌다. 이론만 배우는 수업이 아닌 실제 마케팅이 어떻게 활용되고 있는지 알 수 있는 수업이어서 매 시간 얻어가는 것이 많았다. 팀프로젝트를 하면서 직접 조사 대상 기업을 정하고 분석하는 과정이, 시험을 위해 무작정 암기하며 공부하는 방식보다 마케팅을 직접 경험하는 것 같아 도움이 많이 되었다."

"Marketing Management for me is a very boring course, but the lecture carry in an interesting way(lecturer will explain and try to ask questions to encourage student participation), the discussion held in every end of class made me understand more and made the class teaching go in a fun way."

"I liked the course and the given examples were really suitable. Also the team project was really good because we could talk a lot to other students with different opinions. I think you learn even more with team projects. I think the course was very informative and fun. However the project was less suitable for some people who did have previous experience with marketing."

Materials Characterization

Course Name	Course type (credit/hours)	전선(3/3)		Course code	D081
	Target students Division/major/grade	첨단신소재공학과/3, 4학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월F(팔207) 목F(팔207)(팔207)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Materials Science 1, 2			
	Related basic courses				
	Recommended concurrent courses	각 단계의 실험과목			
	Related advanced courses				
Instructor	Name (title/division)	조성범 (조교수/공과대학 첨단신소재공학과)			
	Office Room Number	팔달관 709호	Office phone Number	2466	e-mail
	Office hours	수 13:30-16:30		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number	팔달 721	Office phone Number		e-mail

1. Introduction

This course provides an introduction to the various analytical instruments essential for evaluating materials, along with their underlying principles and analytical methods. Students will learn about the theories and practices in different areas of materials analysis, including spectroscopy, mass spectrometry, separation analysis, surface analysis, and electron microscopy.

2. Course Objectives

- 1) 재료의 제조공정이나 연구개발 분야에서 직면하는 여러 문제를 다양한 기기분석법을 이용하여 해결법을 찾는 능력을 배양
- 2) 재료제조공정의 여러 상황 하에서 최적의 분석 해결법을 제시하는 능력을 배양
- 3) 극미량, 나노영역 분석에 대응 할 수 있는 분석 능력을 배양
- 4) 각 분석방법의 최적조건과 분성능, 분석한계를 학습하여 최적 분석법 선택 능력을 배양

3. Class types and activities

- 1) Students will summarize the basic principles of each analytical method, clearly defining its scope of application, and considering practical uses and applications.
- 2) Students, either individually or in teams, will conduct in-depth research and presentations on specific analytical methods of interest to maximize learning effectiveness.
- 3) Students will benefit from expert lectures on advanced analytical methods in materials analysis to enhance their understanding.

4. Teaching Method

- | | |
|---|--|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input checked="" type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- 1) 일반화학과 일반물리학을 이해할 정도의 기초지식
 - 2) 다양한 재료에 대한 이해와 그 평가 대상 물성
- 1) Understanding on General Physics and General Chemistry
 - 2) Understanding on Structure and Property of Materials

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	매 강의	10%	
midterm exam	1	40%	
final exam	1	40%	
quiz			
presentation			
discussion			
homework	수 회	10%	진도에 따라 부여
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Ref.	기기분석(4판)	유병설, 박만기, 염정록	동명사	2004
Ref.	기기분석의 원리	Skoog	자유아카데미	2004
Sub	기기분석의 길잡이	Abe 등	자유아카데미	2008
Main	강의 ppt			
Sub	A Guide to materials characterization and chemical analysis	John P. Sibilila	Wiley	1996
Sub	Materials Characterization: Introduction to Microscopic and Spectroscopic Methods	Yang Leng	Wiley	2013

10. Class system and Class shedule

Systematic learning will be conducted on the analytical instruments most frequently applied by materials science and engineering majors in solving product design and manufacturing process issues in the fields of manufacturing, product development, and research.

The learning sequence will be as follows:

- Introduction to Materials Analysis
- Scanning Probe Microscopy (SPM)
- X-ray Analysis
- Electron Microscopy Analysis
- Surface Analysis
- Ion Analysis
- Optical Analysis

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction		조성범	강의		
2	Scanning Probe Microscope (I)		조성범	강의 , 토론		
3	Scanning Probe Microscope (II)		조성범	강의 , 토론		
4	X-ray Diffraction		조성범	강의 , 토론		
5	Electron Diffraction & XRF		조성범	강의 , 토론		
6	Scanning Electron Microscopy (I)		조성범	강의 , 발표, 토론		
7	Scanning Electron Microscopy (II)		조성범	강의 , 발표, 토론		
8	Mid-term Exam		조성범	평가		
9	Transmission Electron Microscopy (I)		조성범	강의 , 발표, 토론		
10	Transmission Electron Microscopy (II)		조성범	발표, 토론		
11	Surface Analysis		조성범	강의 , 토론		
12	Ion-based Characterization (I)		조성범	강의 , 발표, 토론		
13	Ion-based Characterization (II)		조성범	강의 , 토론		
14	Optical Characterizations (I)		조성범	강의 , 견학		
15	Optical Characterizations (II)		조성범	강의 , 발표, 토론		
16	Final Exam		조성범	평가		

11. Other items of notification

Materials Laboratory 2

Course Name	Course type (credit/hours)	전필(2/4)		Course code	D085
	Target students Division/major/grade	신소재공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화10(팔133) 화11(팔133) 화12(팔133) 화13(팔133)(팔133)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	재료공학실험 1 (Materials Laboratory 1)			
	Related basic courses	재료과학 1, 재료과학2			
	Recommmended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	조성범 (조교수/공과대학 첨단신소재공학과)			
	Office Room Number	팔달관 709호	Office phone Number	2466	e-mail
	Office hours		Homepage address	msq.ajou.ac.kr	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

In this course, students will learn how to fabricate the bulk ceramic target and thin film and to test the structural, chemical, electrical and optical properties of materials such as XRD, SEM, BET, sheet resistance, optical transmission and reflection. Basic theories and methods will be lectured to students using hand-outs or lecture notes before conducting experiments. All lectures are to be given in English.

Prerequisites:

Only students who have completed Materials Laboratory 1 and Safety Training are eligible to enroll in this course.

2. Course Objectives

The main objectives of this course are having students learn how to measure or evaluate various mechanical and physical properties of materials and also how to analyse and utilize the test results.

3. Class types and activities

Basic theories and methods will be lectured before students conducting each experiment. All students are grouped into teams of 3-4 students and each team conducts the set of tests and reports the results.

Prerequisites:

Only students who have completed Materials Laboratory 1 and Safety Training are eligible to enroll in this course.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Materials Science 1 and 2, Materials Laboratory 1 course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		20	
midterm exam			
final exam		30	
quiz			
presentation			
discussion			
homework	실험보고서	40	
etc	수업태도	10	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Lecture note	서형탁		
Sub	금속공학실험	대한금속학회	반도출판사	1983

10. Class system and Class shedule

<p>Two Lecture and Each Experiment</p> <p>1. Lecture (1) Basic Principle and Backgroud Knowledge for Process/Measurement by Instructor</p> <p>2. Experiement (1) Demonstration of Sample Preparation, Tool Use, Sample Analysis by TA (2) Conducting Experiment that can be handled by Students (3) Conducting Analysis that can be handled by Students (4) All Experiments under TA instruction</p> <p>3.Data Analysis and Report write-up (1) Data Analysis by group discussion and TA (2) Report write-up and submission</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Lecture on Thin Film PVD / Structural Analysis	E	조성범	Lecture		
2	SiO ₂ , Glass Cleaning 교육	E	조성범	Lab.		
3	Sputter, CVD, RTA	E	조성범	Lab.		
4	Atomic Layer Deposition	E	조성범	Lab.		
5	UV/Vis, Hall Measurement 1	E	조성범	Lab.		
6	UV/Vis, Hall Measurement 2	E	조성범	Lab		
7	Optical Lithography / Pattern OM	E	조성범	Lab		
8	중간고사	E	조성범	Exam		
9	Lecture – Electrical and Optical Analysis	E	조성범	Lab.		
10	Reactive Ion Etching, I-V Analysis	E	조성범	Lecture		
11	E-beam Evaporation	E	조성범	Lab.		
12	Atomic Force Microscopy	E	조성범	Lab		
13	Thin Film Transistor	E	조성범	Lab.		
14	Term Presentation Prep and Tutoring	E	조성범	Lab.		
15	Term Presentation	E	조성범	Lab		
16	Final Exam	E	조성범	Exam		

11. Other items of notification

Materials Laboratory 2

Course Name	Course type (credit/hours)	전필(2/4)		Course code	D086
	Target students Division/major/grade	신소재공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수 10(팔133) 수 11(팔133) 수 12(팔133) 수 13(팔133)(팔133)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	재료공학실험 1 (Materials Laboratory 1)			
	Related basic courses	재료과학 1, 재료과학2			
	Recommmended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	조성범 (조교수/공과대학 첨단신소재공학과)			
	Office Room Number	팔달관 709호	Office phone Number	2466	e-mail
	Office hours		Homepage address	msq.ajou.ac.kr	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

In this course, students will learn how to fabricate the bulk ceramic target and thin film and to test the structural, chemical, electrical and optical properties of materials such as XRD, SEM, BET, sheet resistance, optical transmission and reflection. Basic theories and methods will be lectured to students using hand-outs or lecture notes before conducting experiments. All lectures are to be given in English.

Prerequisites:

Only students who have completed Materials Laboratory 1 and Safety Training are eligible to enroll in this course.

2. Course Objectives

The main objectives of this course are having students learn how to measure or evaluate various mechanical and physical properties of materials and also how to analyse and utilize the test results.

3. Class types and activities

Basic theories and methods will be lectured before students conducting each experiment. All students are grouped into teams of 3-4 students and each team conducts the set of tests and reports the results.

Prerequisites:

Only students who have completed Materials Laboratory 1 and Safety Training are eligible to enroll in this course.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Materials Science 1 and 2, Materials Laboratory 1 course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		20	
midterm exam			
final exam		30	
quiz			
presentation			
discussion			
homework	실험보고서	40	
etc	수업태도	10	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Lecture note	서형탁		
Sub	금속공학실험	대한금속학회	반도출판사	1983

10. Class system and Class shedule

<p>Two Lecture and Each Experiment</p> <p>1. Lecture (1) Basic Principle and Backgroud Knowledge for Process/Measurement by Instructor</p> <p>2. Experiement (1) Demonstration of Sample Preparation, Tool Use, Sample Analysis by TA (2) Conducting Experiment that can be handled by Students (3) Conducting Analysis that can be handled by Students (4) All Experiments under TA instruction</p> <p>3.Data Analysis and Report write-up (1) Data Analysis by group discussion and TA (2) Report write-up and submission</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Lecture on Thin Film PVD / Structural Analysis	E	조성범	Lecture		
2	SiO2, Glass Cleaning 교육	E	조성범	Lab.		
3	Sputter, CVD, RTA	E	조성범	Lab.		
4	Atomic Layer Deposition	E	조성범	Lab.		
5	UV/Vis, Hall Measurement 1	E	조성범	Lab.		
6	UV/Vis, Hall Measurement 2	E	조성범	Lab		
7	Optical Lithography / Pattern OM	E	조성범	Lab		
8	중간고사	E	조성범	Exam		
9	Lecture – Electrical and Optical Analysis	E	조성범	Lab.		
10	Reactive Ion Etching, I-V Analysis	E	조성범	Lecture		
11	E-beam Evaporation	E	조성범	Lab.		
12	Atomic Force Microscopy	E	조성범	Lab		
13	Thin Film Transistor	E	조성범	Lab.		
14	Term Presentation Prep and Tutoring	E	조성범	Lab.		
15	Term Presentation	E	조성범	Lab		
16	Final Exam	E	조성범	Exam		

11. Other items of notification

Materials Laboratory 2

Course Name	Course type (credit/hours)	전필(2/4)		Course code	D087
	Target students Division/major/grade	신소재공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	목10(팔133) 목11(팔133) 목12(팔133) 목13(팔133)(팔133)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	재료공학실험 1 (Materials Laboratory 1)			
	Related basic courses	재료과학 1, 재료과학2			
	Recommmended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	조성범 (조교수/공과대학 첨단신소재공학과)			
	Office Room Number	팔달관 709호	Office phone Number	2466	e-mail
	Office hours		Homepage address	msq.ajou.ac.kr	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

In this course, students will learn how to fabricate the bulk ceramic target and thin film and to test the structural, chemical, electrical and optical properties of materials such as XRD, SEM, BET, sheet resistance, optical transmission and reflection. Basic theories and methods will be lectured to students using hand-outs or lecture notes before conducting experiments. All lectures are to be given in English.

Prerequisites:

Only students who have completed Materials Laboratory 1 and Safety Training are eligible to enroll in this course.

2. Course Objectives

The main objectives of this course are having students learn how to measure or evaluate various mechanical and physical properties of materials and also how to analyse and utilize the test results.

3. Class types and activities

Basic theories and methods will be lectured before students conducting each experiment. All students are grouped into teams of 3-4 students and each team conducts the set of tests and reports the results.

Prerequisites:

Only students who have completed Materials Laboratory 1 and Safety Training are eligible to enroll in this course.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Materials Science 1 and 2, Materials Laboratory 1 course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		20	
midterm exam			
final exam		30	
quiz			
presentation			
discussion			
homework	실험보고서	40	
etc	수업태도	10	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Lecture note	서형탁		
Sub	금속공학실험	대한금속학회	반도출판사	1983

10. Class system and Class shedule

<p>Two Lecture and Each Experiment</p> <p>1. Lecture (1) Basic Principle and Backgroud Knowledge for Process/Measurement by Instructor</p> <p>2. Experiement (1) Demonstration of Sample Preparation, Tool Use, Sample Analysis by TA (2) Conducting Experiment that can be handled by Students (3) Conducting Analysis that can be handled by Students (4) All Experiments under TA instruction</p> <p>3.Data Analysis and Report write-up (1) Data Analysis by group discussion and TA (2) Report write-up and submission</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Lecture on Thin Film PVD / Structural Analysis	E	조성범	Lecture		
2	SiO2, Glass Cleaning 교육	E	조성범	Lab.		
3	Sputter, CVD, RTA	E	조성범	Lab.		
4	Atomic Layer Deposition	E	조성범	Lab.		
5	UV/Vis, Hall Measurement 1	E	조성범	Lab.		
6	UV/Vis, Hall Measurement 2	E	조성범	Lab		
7	Optical Lithography / Pattern OM	E	조성범	Lab		
8	중간고사	E	조성범	Exam		
9	Lecture – Electrical and Optical Analysis	E	조성범	Lab.		
10	Reactive Ion Etching, I-V Analysis	E	조성범	Lecture		
11	E-beam Evaporation	E	조성범	Lab.		
12	Atomic Force Microscopy	E	조성범	Lab		
13	Thin Film Transistor	E	조성범	Lab.		
14	Term Presentation Prep and Tutoring	E	조성범	Lab.		
15	Term Presentation	E	조성범	Lab		
16	Final Exam	E	조성범	Exam		

11. Other items of notification

Mathematical Physics and Numerical Methods 2

Course Name	Course type (credit/hours)	전선(3/3)		Course code	G041
	Target students Division/major/grade	물리학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화D(성 131) 목C(성 131)(성 131)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	수학 1, 수학 2, 수리물리학 및 수치계산 1			
	Related basic courses	물리학 1, 물리학 2			
	Recommanded concurrent courses				
	Related advanced courses	전자기학 1, 전자기학 2, 양자역학 1, 전자기학 2, 통계역학			
Instructor	Name (title/division)	임준원 (조교수/자연과학대학 물리학과)			
	Office Room Number	원천관420호	Office phone Number	2579	e-mail
	Office hours		Homepage address	https://sites.google.com/view/ajou-cmtg	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course teaches the mathematical methods essential in various subjects of physics (quantum mechanics, electromagnetism, solid state physics, thermodynamics, statistical mechanics, AI computational physics, quantum information, etc.).

This course is for the students majoring PHYSICS who already attended the Mathematics 1, 2, and Mathematical Physics and Numerical Methods 1.

Topics include Fourier series, Fourier transform, various differential equations, calculus of variations, tensor analysis, special functions, complex functions, and probability and statistics. We deal with some basic numerical analysis regarding Fourier transform and ordinary differential equations.

2. Course Objectives

본 수업을 통해서 고학년에서 배우게 될 물리학 및 공학의 다양한 주제들을 이해하기 위한 수학적 언어를 습득한다.

3. Class types and activities

Mathematics is said to be the language of physics. For example, the Schrödinger's equation for quantum mechanical wave functions of elementary particles, Maxwell's equations for electromagnetic waves, and Newton's equation of motion for the classical particles, are all described by the mathematical language called the differential equations. When calculating the quantum mechanical energy levels and natural frequencies of a wave, an eigenvalue problem of a matrix must be solved, which is dealt with in the Linear Algebra Part. In order to effectively obtain the electric and magnetic fields in space when charges and currents are given, various techniques related to integration and vector analysis are required. In addition to this, there are various mathematical techniques necessary to understand physics accurately and deeply, such as complex analysis, special functions, infinite series, and Fourier transforms.

This course focuses on learning these mathematical techniques and their possible physical applications. Since the main goal is to learn the language necessary for physics, rigorous mathematical proofs are avoided if possible.

Through this course, students may gain the foundation for the understanding of the cutting-edge disciplines of physics and basic knowledge about the production and processing of data required in the research.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Basic knowledge on the level of Mathematics 1 and 2, and Mathematical physics and Numerical Methods 1.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam	1	45	
final exam	1	45	
quiz			
presentation			
discussion			
homework	2	10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	MATHEMATICAL METHODS IN THE PHYSICAL SCIENCES	MARY L. BOAS	Wiley	

10. Class system and Class shedule

본 과목에서는 푸리에 시리즈와 푸리에 변환을 가장 먼저 배운다. 이는 그 다음 주제인 상미분 방정식을 수치적으로 풀 때 응용될 것이다. 미분 방정식의 해로서 특수 함수들을 심도있게 다룰 예정이며, 특수 함수들의 시리즈 해들 역시 다룰 것이다. 그 다음 목표는 자연스럽게 변수가 더 많아진 경우의 편미분 방정식을 다룰것이다. 마지막으로 수리물리학 1 과 2에서 배웠던 지식들이 종합적으로 사용 될 복소함수 해석에 관해서 다룬 뒤, 통계역학 과목을 대비하여 확률과 관련된 주제들을 다루고 마친다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Fourier series	E	임준원			
2	Fourier transform	E	임준원			
3	Ordinary differential equations	E	임준원			
4	Ordinary differential equations	E	임준원			
5	Numerical methods for ordinary differential equations	E	임준원			
6	Calculus of variations	E	임준원			
7	Tensor analysis	E	임준원			
8	Special functions	E	임준원			
9	Special functions	E	임준원			
10	Series solutions of differential equations	E	임준원			
11	Series solutions of differential equations	E	임준원			
12	Partial differential equations	E	임준원			
13	Partial differential equations	E	임준원			
14	Functions of a complex variable	E	임준원			
15	Functions of a complex variable	E	임준원			
16	Probability and statistics	E	임준원			

11. Other items of notification

Microelectronic Circuits 1

Course Name	Course type (credit/hours)	전필(3/3)		Course code	C088
	Target students Division/major/grade	지능형반도체공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(원538) 금D(원538)(원538)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	회로이론			
	Related basic courses	회로이론, 물리학1, 2			
	Recommended concurrent courses	논리회로, 논리회로실험			
	Related advanced courses	전자회로2, 전자회로실험, 반도체공학, 아날로그IC			
Instructor	Name (title/division)	문태환 (조교수/정보통신대학 지능형반도체공학과)			
	Office Room Number	팔달관 1003-1	Office phone Number	2363	e-mail
	Office hours	email로 선약 바랍니다.		Homepage address	E-class 활용
Teaching Assistant	Name (title/division)				
	Office Room Number	추후 공지	Office phone Number	추후 공지	e-mail 추후 공지

1. Introduction

This course introduces the basics of electronic circuits, which are the hardware part of an electronic system consisting of hardware and software. Topics covered include the principles of operation of diodes and various types of transistors (MOSFETs, BJTs), circuit models of these components, and methods for analyzing and designing circuits consisting of these components. Various types of amplifiers using operational amplifiers are also studied. Upon completion of this course, students will have a basic understanding of electronic circuits.

The topics covered in this course include current-voltage characteristics, circuit models and applications of PN junction diodes, amplifier models, non-idealities and applications of operational amplifiers, current-voltage characteristics of transistors (bipolar junction transistor and MOSFET), circuit models and applications of amplifiers.

2. Course Objectives

- 1) 주어진 규격(리플 전압, 출력 전압 등)의 정류회로 설계 능력 배양 (학습성과 3-2)
→ 주어진 규격(리플 전압, 출력 전압 등)의 정류회로 설계 능력 배양 (학습성과 3)
- 2) 이상적인 연산 증폭기를 가정하여 반전 및 비반전 증폭기, 적분기와 미분기, difference 증폭기 등을 구성요소로 하는 연산증폭기 회로를 설계하는 능력 배양 (학습성과 3-2)
→ 이상적인 연산증폭기라는 가정 아래 반전 및 비반전 증폭기, 적분기와 미분기, difference 증폭기 등을 구성요소로 하는 연산증폭기 회로를 해석하는 능력 배양 (학습성과 1)
- 3) 트랜지스터(BJT, MOSFET) 증폭기의 입출력 전달특성과 동작점, 소신호 이득, 신호의 왜곡 사이의 관계를 인식하여 동작점을 올바르게 설정하는 능력 배양 (학습성과 1)
→ 트랜지스터(BJT, MOSFET) 증폭기의 입출력 전달특성에서 동작점에 따라 출력 파형이 얼마나 어떻게 왜곡되는지, 소신호 이득은 어떻게 변하는지를 파악하여 증폭기의 동작점을 올바르게 설정하는 능력 배양 (학습성과 1)
- 4) 트랜지스터(BJT, MOSFET) 증폭기의 동작점과 증폭특성 사이의 상관관계에 대한 이해를 바탕으로 하여 바이어스 회로를 설계하는 능력 배양 (학습성과 3)
- 5) KCL, KVL을 사용한 직류 및 소신호 해석을 하여 1단 트랜지스터 증폭기의 특성을 해석하는 능력 배양 (학습성과 1)
- 6) 하나의 트랜지스터(BJT, MOSFET)로 이루어진 응용회로를 설계 문제의 규정에서 시작하여 설계하는 능력 배양 (학습성과 1)

3. Class types and activities

- 1) Ensure that the lecture is a time to thoroughly understand the basic concepts. In particular, encourage active participation and lots of questions and answers.
- 2) Check and verify that students have a good grasp of important concepts during class.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- 1) 키르히호프의 전류, 전압법칙을 적용하여 종속 전류원과 전압원이 들어있는 회로를 해석하는 능력
- 2) Thevenin, Norton 등가회로 및 중첩의 정리에 대한 이해 및 활용 능력
- 3) 저항, 커패시터, 인덕터 등 수동 회로부품의 회로적 특성
- 4) SPICE 사용 능력
- 5) Microsoft Excel 활용 능력

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		60	진도고사1 & 진도고사2
final exam		40	기말고사
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Fundamentals of Microelectronics, 2nd Edition (http://as.wiley.com/WileyCDA/WileyTitle/productCd-EHEP000490.html)	Behzad Razavi	WILEY	2015
Sub	Microelectronic Circuits, 5th or 6th Edition (www.oup.com)	A.S.Sedra and K.C.Smith	Oxford University Press	2009
Ref.	SPICE for Circuits and Electronics:using PSpice	M. H.Rashid	PrenticeHall InternationalEditions	1990
Ref.	PSpice for Linear Circuits (uses PSpice version 10) (www.wiley.com)	J. A. Svoboda	Wiley	2007

10. Class system and Class shedule

<p>학습법 소개 -> 반도체와 다이오드 -> 다이오드 응용회로 -> 다이오드와 트랜지스터, 바이폴라 트랜지스터의 증폭 작용 -> 증폭기 모델과 연산 증폭기 -> 바이폴라 트랜지스터 증폭기 -> 전계효과 트랜지스터 증폭기 (다이오드를 이용한 직류전원에서 시작하여 이 전원을 동작점의 설정과 전력 공급원으로 사용하는 증폭기 회로의 순서로 학습. 반도체 소자의 관전에서는 반도체, p형 반도체와 n형 반도체의 접합인 pn 접합 다이오드, pn 접합 다이오드를 가까이 붙인 바이폴라 트랜지스터, 그리고 트랜지스터의 일종인 MOSFET의 순서로 학습. 증폭기의 입장에서는 증폭기의 전달함수, 전달함수의 비선형성에 따른 신호의 왜곡, 동작점, 동작점의 설정, 소신호와 소신호 모델, 증폭기로서의 연산 증폭기, 바이폴라 트랜지스터를 이용한 증폭기, MOSFET를 사용하는 증폭기의 순서로 학습)</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to Microelectronics	K/E	문태환			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Basic Physics of Semiconductors (chapter2)	K/E	문태환			
3	Diode Models and Circuits (chapter3)	K/E	문태환			
4	Applications of Diode(chapter3)	K/E	문태환			
5	Bipolar Transistor Models and Characteristics(chapter4)	K/E	문태환			
6	The PNP Transistor(chapter4)	K/E	문태환			
7	Bipolar Amplifiers, Operating Point (chapter5)	K/E	문태환			
8	Midterm Exam	K/E	문태환			
9	Bipolar Amplifiers Topologies (chapter5)	K/E	문태환			
10	Operation of MOSFET (chapter6)	K/E	문태환			
11	MOS Device Models (chapter6)	K/E	문태환			
12	CMOS Amplifiers (chapter7)	K/E	문태환			
13	CS Stage, CG Stage, Source Follower (chapter 7)	K/E	문태환			
14	Operational Amplifier As A Black Box (chapter8)	K/E	문태환			
15	OP Amp Nonlinear Functions (chapter8)	K/E	문태환			
16	Final Exam	K/E	문태환			

11. Other items of notification

휴보강 계획: 시간 및 장소는 본 강의와 동일 (수금B, 원천관 535호)
 보강 출석은 출석부로 진행함
 9월 18일 (수요일, 추석연휴) -> 중간고사 기간
 10월 09일 (금요일, 한글날) -> 휴보강 없음

Molecular Biology

Course Name	Course type (credit/hours)	전선(3/3)		Course code	G079
	Target students Division/major/grade	생명과학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화C(성 133) 금C(성 133)(성 133)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	Cell Biology, Genetics, Biochemistry			
	Related basic courses	Introductory Biology 1 & 2, Chemistry 1			
	Recommended concurrent courses	Biological Experiment IV			
	Related advanced courses	Genetic Engineering, Bioinformatics, Molecular Genetics			
Instructor	Name (title/division)		한순기 (조교수/자연과학대학 생명과학과)		
	Office Room Number	원천관 209호	Office phone Number		e-mail
	Office hours	by appointment		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course is to provide students with a comprehensive understanding of the fundamental principles and techniques used in studying the structure, function, and interactions of biological molecules at the molecular level. Molecular biology is a field that explores the molecular basis of life, including the mechanisms of genetic information storage, replication, transcription, and translation. It covers various topics, including DNA structure and function, transcription, processing of transcripts, organization of genes, chromatin, DNA replication, DNA repair and translation, protein synthesis and folding, genetic engineering, recombinant DNA technology, and molecular techniques. The course also aims to familiarize students with the key concepts and experimental approaches used in molecular biology research.

2. Course Objectives

3. Class types and activities

- Students will learn basic principle first, mainly from textbooks, and then study molecular biology in depth by analyzing and reasoning about the main experimental principles and results of molecular biology.
- The latest trends and research results in molecular biology also will be introduced.
- On the day before each lecture (at the latest), a copy of the lecture notes/slides (in pdf format) will be uploaded to the bb.
- Most lectures start with a brief overview (~10 minute) of the material covered in the previous class.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

A basic knowledge at the level of introductory biology is absolutely necessary. Knowledge of biochemistry and genetics is a great help in learning.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		40	
final exam		40	
quiz		20	10 times quiz
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Fundamental molecular biology, 3rd edition	Lizabeth A. Allison	Wiley-Blackwell	2021
Sub	기초분자생물학, 3판 (번역서)	최원재 외 공역. Lizabeth A. Allison(저)	Wiley-Blackwell	2023
Ref.	Molecular biology of the gene	James Watson et al.	Pearson	2013

10. Class system and Class shedule

<p>Lecture delivers essential topics in molecular biology perfect for allowing students to develop a concrete understanding of molecular biology.</p> <p>Lecture also provides students with the most up to date techniques and research related to the topic used by most molecular biologists.</p> <p>I. Lectures will cover following topics.</p> <ul style="list-style-type: none"> - Structure of nucleic acids. - Organization of genome. - Replication of DNA. - DNA repair mechanisms. - Transcription in bacteria and eukaryotes. - Epigenetic regulation of gene expression. - RNA processing and post-transcriptitonal regulation. - Mechanisms of translation. <p>II. Every week, student will take a quiz. There will 10 times quizzes throughout the semester.</p> <p>III. Two exams: mid-term and final exams.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction. Ch1. The beginnings of molecular biology	E	한순기	Lecture		
2	Ch 2. Structure of DNA, Ch 3. Versatility of RNA	E	한순기	Lecture		
3	Ch 5. Genome organization and evolution	E	한순기	Lecture		Quiz 1
4	Ch 6. DNA replication and telomere maintenance	E	한순기	Lecture		Quiz 2
5	Ch 6. DNA replication and telomere maintenance	E	한순기	Lecture		Quiz 3
6	Ch 7. DNA repair pathways	E	한순기	Lecture		Quiz 4
7	Ch 8. Transcription in bacteria	E	한순기	Lecture		Quiz 5
8	Mid-term exam	E	한순기		written exam	
9	Ch 9. Transcription in Eukaryotes	E	한순기	Lecture		
10	Ch 9. Transcription in Eukaryotes	E	한순기	Lecture		Quiz 6
11	Ch 10. Epigenetic mechanisms of gene regulation	E	한순기	Lecture		Quiz 7
12	Ch 10. Epigenetic mechanisms of gene regulation	E	한순기	Lecture		Quiz 8
13	Ch 11. RNA processing and Posttranscriptional gene regulation	E	한순기	Lecture		Quiz 9
14	Ch 12. The mechanism of translation	E	한순기	Lecture		Quiz 10
15	Ch 13. Recombinant DNA technology and genetically modified organisms	E	한순기	Lecture		
16	Final exam	E	한순기		written exam	

11. Other items of notification

Operating Systems

Course Name	Course type (credit/hours)	전필(3/3)	Course code	F052
	Target students Division/major/grade	소프트웨어학과/3학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	수B(팔410) 금B(팔410)(팔410)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	Computer programming, data structure, system programming		
	Related basic courses	Computer architecture		
	Recommanded concurrent courses			
	Related advanced courses	Advanced Operating Systems, Advanced Computer Architecture		
Instructor	Name (title/division)	HAMANDAWANA PRINCE (조교수/소프트웨어융합대학 소프트웨어학과)		
	Office Room Number	Office phone Number	e-mail	
	Office hours	Appointment via email	Homepage address	https://dbdc.ajou.ac.kr/home
Teaching Assistant	Name (title/division)			
	Office Room Number	Office phone Number	e-mail	

1. Introduction

Operating systems are system software that abstracts and manages resources such as CPU, memory, storage, and I/O devices that make up a computer system into concepts such as process, thread, virtual memory, and file, while making these resources convenient and efficient for users and programs. To this end, the operating system has an organically combined structure of several modules responsible for process management, memory management, file management, device management, etc.

In this course, we will first look at what the operating system is and the various concepts of system software. Students will learn how the operating system manages each system resource, and how to solve the problems and solutions that arise in the process.

2. Course Objectives

*** 교육목표**

운영체제에 대한 이해를 바탕으로 시스템 소프트웨어에 대한 근본 문제점과 해결 기법을 파악하고, 이를 바탕으로 고급 소프트웨어의 창작 및 개발 능력을 갖추도록 한다.

*** 학습성과**

(1) 운영체제의 기능을 이해한다.

(2) 운영체제의 구조를 이해한다.

(3) 운영체제의 주요 서브시스템에서 나타나는 문제점을 이해하고 이를 해결하는 기법을 이해한다.

- Synchronization 및 해결 기법
- Mutual exclusion
- Deadlock, starvation 현상
- Process scheduling
- Memory 관리 기법
- Storage 및 file systems 기법
- I/O devices의 효율적 이용 기법

(4) 이해된 운영체제 내의 해결 기법을 바탕으로 응용 프로그램의 설계/개발할 수 있다.

3. Class types and activities

1. The class type will be mostly lecture based with visual question and answer quizzes during classes. These random visual questions will give participation points and finally contribute to overall grade (See Method of evaluation Section).

All students should come to every class with a gadget (phone, laptop or tablet) and login to the following URL;

<https://www.classpoint.app?code=0S052>

We are going to use the above Classpoint URL for an interactive classroom environment. Further details on how to login will be given in the first class.

2. After class assignments will also be given to students as form of continuous assessment and tracking student understanding of the concepts.

The assignments are going to be individual based and in C programming language.

4. Teaching Method

lecture

discussion and debate

team project(presentation and case studies)

experiments(role-playing,etc)

designing and production

on-site learning(on-site training)

others

5. Support Systems in Use

e-class

automatic recording system

web-based assignment

cyber lecture

blended learning(combination of online and offline teaching)

class behavior analyzing system

others (gitlab 및 PASubmit을 통한 프로그래밍 과제)

6. Teaching Tools

PBL(Problem Based Learning)

CBL(Case Based Learning)

TBL(Team Based Learning)

others

7. Knowledge and ability required for taking this course

* In order to complete this course, you must have the basic knowledge and tools listed below.

Students who have not completed at least one of the following courses: data structures or computer programming or system programming are not highly recommended to take this class.

* Even if you didn't previously enroll in the computer architecture course, it is not a problem to enroll in this course..

* Essential Basic Knowledge

- C programming: Ability to read and analyze source code
- Data structure
- System programming concepts including processes

* Tools and Manipulation Capabilities

- Programming technology through Linux command line interface

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	If you miss 8 classes you get an automatic F grade.
midterm exam	1	30	
final exam	1	30	
quiz		5	We are going to have many interactive in class visual activities using the provided Classpoint URL. So all students are required to participate. These interactive activities will contribute to 5% of the overall grade.
presentation			
discussion			
homework	4	25	At least 4 Individual theoretical assignments and up to 3 programming and simulation assignments.
etc			
study hours	6시간		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Operating System Concepts (10th edition)	Avi Silberschatz	Wiley	2018

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	Operating Systems: Three Easy Pieces	Remzi H. Arpaci-Dusseau and Andrea C. Arpaci-Dusseau	Arpaci-Dusseau Books	2018

10. Class system and Class shedule

As in all fields, when you accurately understand the motivation of the problem and the phenomenon it causes, you can understand how to solve the problem with great ease. This is the case with the operating system. In order to achieve the goal of the class, first of all, it is necessary to accurately understand the core of the problem being addressed by the operating system, and to understand the solution method and its application based

on the understanding. Based on this point, the class is conducted by repeating the following order.

- 1) Starting a new topic, the definition of the problem and the phenomenon arising from the problem are broadly explained.
- 2) Next, we introduce the techniques proposed to solve the problem.
- 3) Explain how the introduced techniques are implemented and used to provide specific applications of the solution.
- 4) The proposed solutions must be described, applied, and implemented in your own systematic way using methods learnt in class for students to develop and own the skillset.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Class introduction / overview	E	HAMANDAWAN A PRINCE	강의		
2	Operating System Structures	E	HAMANDAWAN A PRINCE	강의		
3	Process concepts	E	HAMANDAWAN A PRINCE	강의		
4	Threads and Concurrency	E	HAMANDAWAN A PRINCE	강의		
5	CPU scheduling	E	HAMANDAWAN A PRINCE	강의		
6	CPU scheduling	E	HAMANDAWAN A PRINCE	강의		
7	Synchronization	E	HAMANDAWAN A PRINCE	강의		
8	Midterm exam	E	HAMANDAWAN A PRINCE	시험		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
9	Synchronization	E	HAMANDAWAN A PRINCE	강의		
10	Memory management	E	HAMANDAWAN A PRINCE	강의		
11	Virtual memory system	E	HAMANDAWAN A PRINCE	강의		
12	Virtual memory system	E	HAMANDAWAN A PRINCE	강의		
13	Mass-storage structure	E	HAMANDAWAN A PRINCE	강의		
14	I/O Systems	E	HAMANDAWAN A PRINCE	강의		
15	File-Systems	E	HAMANDAWAN A PRINCE	강의		
16	Final exam	E	HAMANDAWAN A PRINCE	시험		

11. Other items of notification

N/A

Operations Management

Course Name	Course type (credit/hours)	전필 (3/3)			Course code	1042
	Target students Division/major/grade	경영학부/경영학전공 2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(다B106) 금D(다B106)(다B106)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	계량경영, 통계학				
	Related basic courses	계량경영, 통계학				
	Recommanded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	이창환 (교수/경영대학 경영학과)				
	Office Room Number	다422	Office phone Number	2911	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

Specifically, we will discuss (1) basic concepts of business processes and management strategy, (2) key process measures and their relationships, (3) the effect of uncertainty in flows on the process performance, and (4) synchronization of flows of materials and information.

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input checked="" type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input checked="" type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input checked="" type="checkbox"/> cyber lecture	<input checked="" type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

Lecture Notes/Courseware: The outline of lecture notes (mostly in Powerpoint files) and Excel data files necessary for the analyses of examples and cases will be available at <http://biz.ajou.ac.kr>.with Download Password: 2911. The file with heading (0) denotes initial entry, and the file with heading (M) represents modified entry.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5%	
midterm exam	1	45%	
final exam	1	45%	
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Managing Business Process Flows (MBPF)	Ravi, A., S. Chopra, S. D. Des	printice Hall	2006

10. Class system and Class shedule

Basically, the class instructional format will be a dialogue between the students and the instructor. It is important to note that strong class participation is founded on adequate preparation. You will be expected to have thoroughly reviewed the material on every class subjects prior to its discussion in class. When you are prepared, the class discussion is greatly enhanced and everyone including me learns far more than otherwise.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Processes and Strategy :Introduction		이창환			
2	Products and Processes Process Flow Measures		이창환			
3	Process Flow Measures Three Key Operational Measures Little's Law and Applications Analyzing Income Statement		이창환			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Flow Time Analysis Critical Path Method Application: Kristen's Cookie Co		이창환			
5	Uncertain Activity Times		이창환			
6	Flow Rate Analysis Capacity Measurements Product Mix Decisions Linear Programming LP in a Spreadsheet		이창환			
7	Midterm Test		이창환			
8	Inventory Analysis Inventory Basics, EOQ Price Discounts: Forward Buying		이창환			
9	Safety Inventory Safety Stock & Service Level Effect of Centralization Supply Chain Coordination		이창환			
10	Safety Capacity Capacity Analysis		이창환			
11	Queuing Models Variance Propagation		이창환			
12	Queuing Models Variance Propagation		이창환			
13	Queuing Models Variance Propagation		이창환			
14	Process Integration Synchronization & Improvement		이창환			
15	Business Ethics In Operations		이창환			
16	Final Exam		이창환			

11. Other items of notification

Operations Management

Course Name	Course type (credit/hours)	전필(3/3)			Course code	1043
	Target students Division/major/grade	Business Admin./2nd year students			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(다B106) 수C(다B106)(다B106)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	Quantitative Business Analysis, Business Statistic				
	Related basic courses	Quantitative Business Analysis, Business Statistic				
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	성민제 (교수/경영대학 경영학과)				
	Office Room Number	다526	Office phone Number	2912	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Business processes transform inputs into outputs, either physical goods or services, to satisfy customer needs. This transformation involves a flow of materials and information through a network of various activities including storage buffers. This course covers tools and methods to manage the business processes, which include both long-term strategic planning and short-term adaptive control. Specifically, we will discuss (1) basic concepts of business processes and management strategy, (2) key process measures and their relationships, (3) the effect of uncertainty in flows on the process performance, and (4) synchronization of flows of materials and information.

2. Course Objectives

ILO(Intended Learning Objective) : K1: Students understand basic theoretical knowledge in core areas of Business Administration/E-Business.

3. Class types and activities

Class Format: Basically, the class instructional format will be a dialogue between the students and the instructor. It is important to note that strong class participation is founded on adequate preparation. You will be expected to have thoroughly reviewed the material on every class subjects prior to its discussion in class. When you are prepared, the class discussion is greatly enhanced and everyone including me learns far more than otherwise.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Lecture Notes/Courseware: The outline of lecture notes (mostly in Powerpoint files) and Excel data files necessary for the analyses of examples and cases will be available on e-class web.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			1 penalty point for each unexcused absence
midterm exam		45%	
final exam		45%	
quiz		10%	
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Managing Business Process Flows (MBPF) 3rd ed.	Ravi, A., S. Chopra, S. D. Des	printice Hall	2012

10. Class system and Class shedule

Basically, the class instructional format will be a dialogue between the students and the instructor. It is important to note that strong class participation is founded on adequate preparation. You will be expected to have thoroughly reviewed the material on every class subjects prior to its discussion in class. When you are prepared, the class discussion is greatly enhanced and everyone including me learns far more than otherwise.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Processes and Strategy :Introduction		성민제	Lecture		
2	Products and Processes Process Flow Measures		성민제	Lecture		
3	Process Flow Measures Three Key Operational Measures Little's Law and Applications Analyzing Income Statement		성민제	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Flow Time Analysis Critical Path Method Application: Kristen's Cookie Co		성민제	Lecture		
5	Uncertain Activity Times		성민제	Lecture		
6	Flow Rate Analysis Capacity Measurements Product Mix Decisions Linear Programming LP in a Spreadsheet		성민제	Lecture		
7	Midterm Test		성민제	Test		
8	Inventory Analysis Inventory Basics, EOQ Price Discounts: Forward Buying		성민제	Lecture		
9	Safety Inventory Safety Stock & Service Level Effect of Centralization Supply Chain Coordination		성민제	Lecture		
10	Safety Capacity Capacity Analysis		성민제	Lecture		
11	Queuing Models Variance Propagation		성민제	Lecture		
12	Queuing Models Variance Propagation		성민제	Lecture		
13	Queuing Models Variance Propagation		성민제	Lecture		
14	Process Integration Synchronization & Improvement		성민제	Lecture		
15	Business Ethics In Operations		성민제	Lecture		
16	Final Exam		성민제	Test		

11. Other items of notification

Organizational Behavior

Course Name	Course type (credit/hours)	전필(3/3)			Course code	1019
	Target students Division/major/grade	2,3,4학년/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(다310) 수C(다310)(다310)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	Only offered to sophomore and above.				
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김도영 (교수/경영대학 경영학과)				
	Office Room Number	다522	Office phone Number	2914	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course emphasizes an empirical approach to the study of individual and group behavior within the context of the organization and as affected by a wide array of emerging organizational realities. It provides current and emerging theoretical and practical knowledge for understanding topics such as individual differences (personality), research methods, perception, motivation, job satisfaction and organizational commitment, leadership, and managerial decision-making. The major objective of this course is to understand basic organizational behavior concepts and research, models, and moving from individual behavior to the group and to the organization as a whole.

2. Course Objectives

The major objective of this course is to understand basic organizational behavior concepts and research, models, and moving from individual behavior to the group and to the organization

3. Class types and activities

Reading assignments

Class discussion/lecture will be based upon the readings listed in this syllabus for each day and will extend the materials from time to time. Each class requires a high degree of participation. Therefore, it is critical that you complete the reading assignment before class so that you will understand the material presented in class and can contribute to the discussion if it happens.

Class Notes

Course notes are available for lectures prepared by the instructor. These course notes are NOT a replacement for your own notes; they are meant to help you organize your notes and keep up with the lecture. There will be many details discussed in class and textbook that will not be included on the notes, and you will be responsible for these details on the exam.

4. Teaching Method

lecture

discussion and debate

team project(presentation and case studies)

experiments(role-playing,etc)

designing and production

on-site learning(on-site training)

others

5. Support Systems in Use

e-class

automatic recording system

web-based assignment

cyber lecture

blended learning(combination of online and offline teaching)

class behavior analyzing system

others

6. Teaching Tools

PBL(Problem Based Learning)

CBL(Case Based Learning)

TBL(Team Based Learning)

others

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		25%	약 1시간 10분 가량 진행되며 중간고사의 경우 40~50개의 객관식, T/F, 단답형 문제
final exam		30%	기말고사는 60~70개의 객관식 문제가 그동안 수업시간에 배운 강의 및 주교재, 부교재 내용에서 출제된다. 기말고사의 시험범위는 누적되어 기존의 중간고사 범위에서 약 30%, 중간고사 이후 범위에서 나머지 70%가 출제된다.
quiz		15%	학생들의 지속적이고 꾸준한 학습을 돕기 위해 마련한 방법이다. 수업시간에 다루는 내용이 교재의 상당 부분을 포함하기 때문에, 학생들이 사전에 교재를 읽고 수업에 출석하는 것이 매우 중요하다. 학기 중 총 4차례의 퀴즈가 주어지며 문제는 퀴즈당 7~10문제로 출제된다.
presentation			
discussion		10%	WYTs (What is Your Thought? session)의 Flipped Learning 방법을 통한 Discussion 및 응답
homework		10%	수업시간에 배운 과학적 이론과 지식을 업무현장에서의 실제 사례에 적용해보기 위한 연습이다. 각 팀은 공동으로 사례별 보고서를 작성하도록 한다. 조별 과제는 3명이 한 조를 구성함을 원칙으로 한다. 각 조에서는 공동으로 2개의 실제 사례를 선택하여 수업시간에 배운 ?
etc		10%	Class Participation
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Understanding and Managing Organizational Behavior	George, M. J. & Jones, G. R.	Pearson Education Co	
Etc	가장 최신 버전의 교재로 교체 될 수 있으며, 학기 시작시에 학생께 공지가 될것임.			

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Class Orientation & Ch. 1: Intro. To Organizational Behavior	E	김도영			
2	Intro. To Organizational Behavior (Continue)	E	김도영			
3	Intro. To Organizational Behavior (Continue) & Personality and Ability, Methods in the Study of Personality	E	김도영			
4	What is Personality? and The Trait Perspective & Individual Differences	E	김도영			
5	Work Values, Attitudes, and Moods and Emotions	E	김도영			
6	Perception and Attribution, and the Management of Diversity	E	김도영			
7	Learning and Creativity	E	김도영			
8	Midterm Week	E	김도영			
9	The Nature of Work Motivation and Managing Stress & Work-Life Balance	E	김도영			
10	Managing Stress & Work-Life Balance (Continues) and The Nature of Work Groups and Teams	E	김도영			
11	The Nature of Work Groups and Teams (Continue)	E	김도영			
12	Leaders & Leadership and Decision Making and Organizational Learning	E	김도영			
13	Decision Making and Organizational Learning (Continues)	E	김도영			
14	Power, Politics, Conflict and Negotiation and Organizational Culture and Behavior and Organizational Design and Structure	E	김도영			
15	Organizational Culture and Ethical Behavior & Organizational Change and Development	E	김도영			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
16	Final Exam	E	김도영			

11. Other items of notification

Organizational Behavior

Course Name	Course type (credit/hours)	전필(3/3)			Course code	1021
	Target students Division/major/grade	경영학부/2학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(다310) 목B(다310)(다310)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	정대용 (교수/경영대학 경영학과)				
	Office Room Number	다산관 424	Office phone Number	2840	e-mail	
	Office hours	1pm-2:30pm, Tue.		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number	509 Dasan Hall	Office phone Number	010-7383-4537	e-mail	ich45337@hanmail.net

1. Introduction

Industrial relations (IR) is the interdisciplinary field of study that concentrates on workers and their unions (and associations), employers and their organizations, government, and the environment in which these “actors” interact. This course explores the components and dynamics of IR systems and how the IR actors use rule-making processes to establish terms and conditions of employment in their environmental settings. A secondary emphasis is on international comparisons to enhance understanding of the unique qualities of the Korean IR system and an appreciation for international variations. The course utilizes an interdisciplinary approach, drawing on theories and concepts from economics, psychology, sociology, labor law, and other behavioral sciences.

2. Course Objectives

3. Class types and activities

1. We hold live online classes in Zoom due to the COVID-19 situation (A couple offline classes could be held if necessary). You must have a camera & a microphone in your computer and turn them on during class to show your face/upper body (no mask/no hat) and participate in discussions effectively. Two offline exams will be given.

2. I do not use a spoon-feeding teaching style. Learning in my class is based on collective action (discussion-bases class), and all activities in class will be conducted in English only, You are required to complete the readings prior to each class, contribute to the discussion of the material, and ask questions when you do not understand. You will learn from your classmates and help them learn. As an instructor, I am here to facilitate your mutual teaching and learning, not to give you "the answers." Active participation in discussions is expected, and your participation will be evaluated. As such, you should have an appropriate level of English skills and willingness to participate in class activities.

WARNING: If you are uncomfortable or unwilling to participate and contribute to a joint-learning environment, you should consider taking another course (or taking this course with another instructor).

4. Teaching Method

lecture

discussion and debate

team project(presentation and case studies)

experiments(role-playing,etc)

designing and production

on-site learning(on-site training)

others

5. Support Systems in Use

e-class

automatic recording system

web-based assignment

cyber lecture

blended learning(combination of online and offline teaching)

class behavior analyzing system

others

6. Teaching Tools

PBL(Problem Based Learning)

CBL(Case Based Learning)

TBL(Team Based Learning)

others

7. Knowledge and ability required for taking this course

1. College-level English skills.
 2. Willingness to participate in class activities.

NOTE: all activities in class will be conducted in English only.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam	1	35%	Short essay questions.
final exam	1	35%	Short essay questions.
quiz		10%	Pop-quizzes (unannounced) will be given several times throughout the semester.
presentation			
discussion			
homework			
etc		20%	Participation in class activities
study hours	3-7 hours depending on your abilities		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Course pack (Various Articles)	Authors	Publishers	0000
Main	An Introduction to U.S. Collective Bargaining and Labor Relations	Harry C. Katz, Thomas A. Kochan, and Alexander J. S. Colvin	Cornell University Press	2017

10. Class system and Class shedule

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to the field of IR	E	정대용			
2	Classical Theories: Adam Smith & Karl Marx	E	정대용			
3	Institutionalist View & System Approach	E	정대용			
4	Korean IR I	E	정대용			
5	Korean IR II	E	정대용			
6	Environment, the State & Labor Laws	E	정대용			
7	Union Strategies & Structures	E	정대용			
8	Mid-term Exam (Offline)	E	정대용			
9	Management Strategies & Structures	E	정대용			
10	Union Organizing & Bargaining Structures I	E	정대용			
11	Union Organizing & Bargaining Structures II	E	정대용			
12	Negotiation Process & Strikes	E	정대용			
13	Participatory Processes	E	정대용			
14	International & Comparative IR: Germany	E	정대용			
15	International & Comparative IR: Japan	E	정대용			
16	Exam Review & Final Exam (Offline)	E	정대용			

11. Other items of notification

1. My course does not fit those students whose main goal is to get a "good grade." It better fits those who enjoy the process of learning.
2. This course is offered for upper-level undergraduate (third & fourth year) students, and its content is complex. You should take another course if you are looking for an "easy course."
3. If you already took this course with me before, you are not allowed to retake this course with me. It would be more beneficial for you to retake this course with another prof.

Organizational Theory(Capstone Design)

Course Name	Course type (credit/hours)	전선(3/3)		Course code	1024
	Target students Division/major/grade	경영학과/3학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화D(다111) 목C(다111)(다111)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses	조직행위론			
	Recommanded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	이인			
	Office Room Number	다산관 510-1	Office phone Number	3631	e-mail
	Office hours	이메일로 연락하세요.		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course is designed to increase your knowledge and skills in analyzing, managing, and understanding organizations and organizational processes. The course will provide you with theoretical frameworks to analyze organizations and their relationship with external environments. The course will cover a variety of topics, such as organizational structures and processes, inter-organizational relationships, relationship between organizations and external environments, organizational culture and ethics, and power and conflict.

2. Course Objectives

3. Class types and activities

Lectures
Individual assignment
Team discussion
Team project
Participation

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

N/A

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam	1	25	객관식/주관식 (대체과제로 변경될 수 있음)
final exam	1	25	객관식/주관식
quiz			
presentation			
discussion		10	수업 중 팀 토론
homework		10	개인과제
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	조직이론과 설계 (한) / Organizational Theory and Design	Daft, R. L.	CENGAGE	13판
Main	Course materials (PPT slides / reading materials) will be distributed in the class via Ajou BB			
Sub	Organizations and Organizing: Rational, Natrual, and Open System Perspectives	Scott, W. R. & Davis, G.	Taylor & Francis	2007

10. Class system and Class shedule

N/A

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to the course / Ch1. Organizations and OrganizationTheory	E	이인			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Ch 2. Strategy, organization design, and effectiveness	E	이인			
3	Ch 3. Fundamentals of organizational structure	E	이인			
4	Ch 4. The external environment	E	이인			
5	Ch 5. Interorganizational relationships	E	이인			
6	Ch 6. Designing organizations for the international environment	E	이인			
7	Ch 7. Designs for societal impact: Dual-purpose organizations, corporate sustainability, and ethics	E	이인			
8	Mid-term exam	E	이인			
9	Ch 10. Organization size, life cycle, and decline	E	이인			
10	Ch 11. Organizational culture and control	E	이인			
11	Ch 12. Innovation and change	E	이인			
12	Ch 13. Decision-making processes	E	이인			
13	Ch 14. Conflict, power, and politics	E	이인			
14	Team project presentations #1	E	이인			
15	Team project presentations #2	E	이인			
16	Final exam	E	이인			

11. Other items of notification

All the policies, schedules, and other details are subject to change if the instructor deems necessary.
 Detailed instruction on team project will be provided in class.
 The final version of the syllabus will be distributed in class.

Physical Thoughts for AI

Course Name	Course type (credit/hours)	교필(3/3)	Course code	G001
	Target students Division/major/grade	물리학과/1학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	화C(원540) 금C(원540)(원540)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	없음		
	Related basic courses	없음		
	Recommended concurrent courses	없음		
	Related advanced courses	없음		

Instructor	Name (title/division)		윤종희 (조교수/자연과학대학 물리학과)		
	Office Room Number	원천관 411호	Office phone Number	2580	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

2. Course Objectives

- 담당교수와의 상호작용을 통해 학과에 대한 이해와 소속감을 높인다.
- 물리학에 적용되는 인공지능을 배움으로써 물리학과에서 배울 수 있는 첨단 기술에 대해 이해한다.
- 대학 및 학과의 교육, 활동, 진로, 지원 등에 대해 이해하고, 필요한 경우 추가적인 정보를 찾을 수 있다.
- 대학 생활에 필요한 발표자료 제작 능력, 발표 능력, 보고서 작성 능력을 키울 수 있다.

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input checked="" type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input checked="" type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

아주대학교 물리학과 학부생

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		30%	수업태도 포함
midterm exam			
final exam			
quiz			
presentation		40%	
discussion			
homework		30%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	강의 자료			

10. Class system and Class shedule

<p>학생 주도적인 학습 운용을 목표로 프로젝트, 시뮬레이션, 보고서 작성 및 발표 등을 중심으로 운용한다.</p>
--

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	오리엔테이션	K	윤종희			
2	물리학과 인공지능	K	윤종희			
3	엑셀 - 시뮬레이션 1	K	윤종희			
4	엑셀 - 시뮬레이션 2	K	윤종희			
5	파워포인트 활용	K	윤종희			
6	파이썬 활용1	K	윤종희			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
7	파이썬 활용2	K	윤종희			
8	중간고사	K	윤종희			
9	인공지능 개론1	K	윤종희			
10	인공지능 개론2	K	윤종희			
11	연구소개1	K	윤종희			
12	연구소개2	K	윤종희			
13	발표 - 물리학과 인공지능1	K	윤종희			
14	발표 - 물리학과 인공지능2	K	윤종희			
15	발표 - 물리학과 인공지능3	K	윤종희			
16	기말고사	K	윤종희			

11. Other items of notification

Principle of Economics 1

Course Name	Course type (credit/hours)	전필(3/3)		Course code	K013
	Target students Division/major/grade	Economics, Business Administration, and Others/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(연암502) 수E(연암502)(연암502)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	No prerequisites are needed for this course.			
	Related basic courses	No prerequisites are needed for this course.			
	Recommended concurrent courses				
	Related advanced courses	Microeconomics, Econometrics, Applied Econometrics, Economics of Culture and Arts			
Instructor	Name (title/division)	신선호 (조교수/사회과학대학 경제학과)			
	Office Room Number	율곡관 406호	Office phone Number	2743	e-mail
	Office hours	By appointment via email		Homepage address	https://sites.google.com/view/seonho-shin-economics
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

- This course aims to cover the essential concepts, theories, and models of microeconomics that are fundamental for first-year undergraduate students.
- Evaluation criteria: ① Attendance ② Quizzes to assess understanding ③ Midterm and final exams
- No team assignments will be given.
- No individual assignments will be given.
- [Textbook] While it is recommended to thoroughly read the primary textbook listed in this syllabus, it is not mandatory to purchase this specific book. You may choose any introductory economics textbook that best suits your needs. (It is recommended to select an English version.)
- This course will be conducted entirely in English. However, it is an economics course, not a language course. Thus, students English proficiency will not be factored into the evaluation.

2. Course Objectives

3. Class types and activities

- The instructor expects students enrolled in this course to develop the following skills.
- ① Accurately understanding the fundamental concepts, theories, and models of microeconomics
 - ② Applying the key concepts, theories, and models of microeconomics in a flexible manner to real-world economic problems and business cases
 - ③ Understanding and analyzing various figures, graphs, tables, etc.
 - ④ Examining and criticizing diverse social and economic issues highlighted by the media

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- No prerequisites are needed for this course.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	14	10	[Attendance]
midterm exam	1	35	[Midterm examination]
final exam	1	35	[Final examination]
quiz	5	20	[Quiz] 4 Points × 5 Times (Subject to change)
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Principles of Economics	N. Gregory Mankiw	Any version of the book suffices.	
Ref.	The Economist [https://www.economist.com/]		https://www.economist.com/	

10. Class system and Class shedule

<p>■ This course will adhere to the lecture plan presented in this syllabus. However, it should be noted that the scope and order of topics may be adjusted based on the pace at which students are learning.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction & Overview	E	신선호			
2	Supply and Demand Theory	E	신선호			
3	Elasticity of Demand and Supply	E	신선호			
4	Consumer Theory: Marginal Utility	E	신선호			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Consumer Theory: Indifference Curves	E	신선희			
6	Consumer Theory: Present Preferences and Expected Utility	E	신선희			
7	Midterm Examination Preparation and Wrap-up	E	신선희			
8	[Midterm examination]	E	신선희			
9	Producer Theory: Production	E	신선희			
10	Producer Theory: Costs	E	신선희			
11	Market Structures: Perfect Competition	E	신선희			
12	Market Structures: Monopoly	E	신선희			
13	Market Structures: Monopolistic Competition and Oligopoly	E	신선희			
14	Income Distribution	E	신선희			
15	Final Examination Preparation and Wrap-up	E	신선희			
16	[Final examination]	E	신선희			

11. Other items of notification

■ [Notice for Students with Disabilities]

- The instructor of this course strongly encourages students with disabilities to enroll. Students with disabilities are encouraged to communicate any questions or class-related issues with the instructor (Email to: shshin@ajou.ac.kr).
- To ensure that students with disabilities are provided with accurate information regarding assignments and test assessments, keynotes and relevant information will be posted on Ajou Bb.
- For students who are blind or visually impaired, as well as students with cognitive disabilities, the midterm and final assessments will have extended time (1.5x or 1.7x).
- The instructor provides alternative formats of course materials, such as files or printouts, for students with disabilities who require alternatives to on-screen presentations.

Probability and Statistics 1

Course Name	Course type (credit/hours)	교필(3/3)			Course code	M002
	Target students Division/major/grade	미디어학과/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	수D(산B103) 금D(산B103)(산B103)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Teemu H. Laine (교수/소프트웨어융합대학 디지털미디어학과)				
	Office Room Number	산학협력원 618호	Office phone Number	1851	e-mail	
	Office hours	Thursday 9am-11am		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

The world we live in is full of uncertainties. Probability is a branch of mathematics that deals with uncertainties. Our world is also full of data. Statistics is all about collecting, organizing, analyzing, interpreting, and presenting data. In this course we will study the basics of probability and statistics, which will prepare you for more advanced courses. The elementary knowledge of probability and statistics will be very useful in everyday life and especially if you will work with research and development.

2. Course Objectives

Students will gain basic understanding of probability theory and will learn the basic tools of statistics. They will then apply the learned concepts to solve real problems.

The expected learning outcomes are as follows:

1. Learn that events and their occurrences can be defined in mathematical terms.
2. Understand random variables and various uses for them.
3. Understand how random variables can be used to model random phenomena
4. Learn about different distributions (e.g. normal, geometric, binomial, Poisson)
5. Learn effective ways to do sampling in statistics
6. Learn how to make predictions in statistics and understand the meaning of confidence in these predictions

3. Class types and activities

The course uses lectures and voluntary exercises as the main teaching methods. During lectures, the professor will introduce theoretical concepts, followed by practical examples.

Lectures will be face-to-face and they will be recorded so students can watch them again. There will be opportunities for discussion and Q&A when students can ask the professor about the lecture topics etc.

Mid-term and final exams are used to test the students understanding of the course topics.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (KakaoTalk chatroom for quick help and support) | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input checked="" type="checkbox"/> others (KakaoTalk chatroom) | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Students must have basic English communication skills because the course is delivered 100% in English. There may be a Korean TA but it is not guaranteed.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance
midterm exam		40	Mid-term exam
final exam		40	Final exam
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Head First Statistics (Korean: 실생활 예제로 배우는 정말 쉬운 통계 이야기)	Griffiths	Oreilly Media	2008

10. Class system and Class shedule

During the course, students will learn the basic concepts and theories of probability, such as events, observations, random variables, density, expected value, variance, geometric distribution, binomial distribution, Poisson distribution, and normal distribution. Based on this, the main areas of statistics, such as point estimation, interval estimation, confidence intervals, hypothesis testing, and the Chi-squared test will also be covered.

The lectures will follow the chapters of the textbook. Each week we cover one of the chapters, with additional examples. Moreover, students will be provided with voluntary assignments that help them prepare for the exams. These assignments will relate to topics covered in the lectures.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction and visualizing information	E	Teemu H. Laine	Lectures, demonstrations, discussion, practice		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Measuring central tendency	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
3	Measuring variability and spread	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
4	Calculating probabilities	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
5	Using discrete probability distributions	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
6	Permutations and combinations	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
7	Geometric, binomial and Poisson distributions	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
8	Mid-term exam	E	Teemu H. Laine	Exam		
9	Using the normal distribution 1	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
10	Using the normal distribution 2	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
11	Using statistical sampling	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
12	Estimating populations and samples	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
13	Constructing confidence intervals	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
14	Using Hypothesis tests	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
15	Chi-squared distribution	E	Teemu H. Laine	Lectures, demonstrations , discussion, practice		
16	Final exam	E	Teemu H. Laine	Exam		

11. Other items of notification

Public Digital Innovation

Course Name	Course type (credit/hours)	전선(3/3)			Course code	K035
	Target students Division/major/grade	행정학과/4학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화E(울255) 금E(울255)(울255)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	권향원 (부교수/사회과학대학 행정학과)				
	Office Room Number	울곡관 410호	Office phone Number	2750	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	kgb061430@naver.com

1. Introduction

This study aims at understanding the concept and practice of government innovation particularly from the perspective of digital transformation. Digital technology is transforming government public services in a different way. Therefore, Digital technologies are now regarded as essential competencies in the public sector. This course, therefore, helps students understand the concepts, applications, and limitations (or constraints) of digital technologies used in the public sector.

2. Course Objectives

3. Class types and activities

This course has a learner activity-centered class format in which "when the instructor raises an issue, students collect and learn data related to the issue."

For example, if a lecturer entrusts the job of recruiting to an artificial intelligence (AI) for the Nth and Ath positions, biased decisions may be made in terms of gender, race, and class depending on the contamination of the learning data. At this time, who is responsible for such bias? It raises the issue of "Should we be responsible?" and introduces related issues. Then, in class B, students collect related A, B, and C positions, organize them briefly, and load the relevant content into Aju BB (substitute for lecture in session B). The instructor organizes and introduces the content included in the next parking A session and helps students understand the content, including excellent perspectives and examples. When necessary, the latest theories or theories are introduced. In this course, instructors also teach students how to write an issue paper, which is an essential work competency in government and private companies.

In this way, the course consists of lectures in Part A and learner activities in Part B, and excellent issues and best cases among related content are given the opportunity to be presented in academic papers at the end of the semester.

The final exam is conducted by asking students whether they can write down issues for each issue covered in class in Korean.

4. Teaching Method

- | | |
|---|---|
| <input type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others (본 강좌는 "교강사가 이슈를 제기하면, 수강생이 이슈와 관련한 쟁점들을 자료수집하여 학습"하는 | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

기초적인 영어독해 및 청취능력. 사회과학의 기본소향.
(Basic English reading and listening skills. Understanding basic trends in social science.)

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	15	20%	실강의 참석여부 (attendance at actual lecture)
midterm exam			
final exam	1	30%	강의에서 다룬 이슈별 쟁점들을 이해하고 있는 여부를 서술형으로 평가 (국문작성 가능) (Evaluate in descriptive form whether you understand each issue covered in the lecture (can be written in Korean))
quiz			
presentation			
discussion			
homework	13	35	이슈페이퍼의 타당성, 적시성, 정확성, 참신성 등 4개 항목으로 블라인드 평가 (Blind evaluation of issue papers based on four items: validity, timeliness, accuracy, and novelty)
etc			
study hours	이슈페이퍼 정시 제출여부로 점검 (Check whether issue paper is submitted on time or not)		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	주차별 강의노트 및 관련자료 (Weekly Lecture Notes (PPT) and Reading Materials)			

10. Class system and Class shedule

Please refer to the preceding note

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction and Orientation	E	권향원	Orientation		
2	Understanding the new wave of digital transformation in and around governments	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
3	Issue 1. Privacy concerns: The collection and use of citizen data by government agencies through digital technologies.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
4	Issue 2. Interoperability: Challenges in integrating new systems with legacy infrastructure and ensuring compatibility across different government departments.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
5	Issue 3. Regulatory challenges: The need for new or updated regulations to govern the use of emerging technologies in government.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
6	Issue 4. Transparency vs. secrecy: Balancing the need for government transparency with national security concerns in digital systems.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
7	Issue 5. AI bias: The potential for AI algorithms to perpetuate or amplify existing biases in decision-making processes.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
8	No Class	E	권향원	No Class		
9	Issue 6. Job displacement: Concerns about automation and AI replacing human workers in government roles.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
10	Issue 7. Cost-effectiveness: Debates over the long-term financial benefits versus the high initial investment costs of implementing new technologies.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
11	Issue 8. Data ownership and sovereignty: Questions about who owns and controls data collected by government agencies, especially when using cloud services.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
12	Issue 9. Ethical use of AI: Determining appropriate boundaries for AI use in sensitive areas like law enforcement or social services.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
13	Issue 10. Security risks: Potential vulnerabilities in digital systems that could lead to data breaches or cyberattacks on critical infrastructure.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
14	Issue 11. Digital divide: Unequal access to digital services among different demographic groups, potentially exacerbating existing inequalities.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
15	Issue 12. Accountability: Determining responsibility and liability when automated systems make errors or decisions with significant consequences.	E	권향원	Blended Learning	Attendance & issue paper submission and its quality	
16	Final Exam	E	권향원	Attendance Test		

11. Other items of notification

Research Methods in Psycho

Course Name	Course type (credit/hours)	전필 (3/3)			Course code	K055
	Target students Division/major/grade	심리학과/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화D(울256) 목C(울256)(울256)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	심리통계와 데이터분석				
	Related basic courses					
	Recommended concurrent courses	심리통계2				
	Related advanced courses					
Instructor	Name (title/division)	장세아 (심리학과)				
	Office Room Number	울곡관 520호	Office phone Number	2780	e-mail	
	Office hours	By appointment		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course will provide an introduction to how psychological scientists develop and test research questions about the human mind and behavior. We will explore how empirical investigation differs from other ways of learning about the world, and how psychologists employ various methodologies to study psychological research questions. We will study the relationships between research questions and research designs, the benefits and drawbacks of different measurement and sampling approaches, the ethical implications of various research paradigms, and best practices in communicating research findings clearly. Students will be able to improve their abilities to critically evaluate data that they encounter in scientific journals and to plan their own research projects in the future.

2. Course Objectives

3. Class types and activities

This course is primarily a lecture and exam-based course, supplemented with group activities and presentations. Lectures will provide an introduction to different types of psychological research methods and how to design psychological research. In order to provide students with hands-on experiences in research design and scientific communication, there will be group activities and oral presentations. Finally, there will be two exams (midterm and final), and they will be weighted equally.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Basic computer and web-browsing skills (Required); Basic statistics (Recommended)

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam	1	35	
final exam	1	35	
quiz			
presentation	1	20	Research Proposal
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Research Methods in Psychology: Evaluating a World of Information (4th Edition)	Beth Morling	Norton & Company	2020
Sub	Doing Psychology Experiments (7th Edition)	David W. Martin	Cengage Learning	2007

10. Class system and Class shedule

Lecture: Students will be introduced to the key concepts of Research Methods in Psychology
Exam: Students will be assessed with a midterm and final
Group project: Students will engage in group work in order to propose an original psychological experiment they could carry out in the future

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction / Why do we study research methods?	E	장세아	Lecture		
2	Generating Research Ideas	E	장세아	Lecture		
3	Research Ethics	E	장세아	Lecture		
4	Identifying Good Measurement	E	장세아	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Sampling	E	장세아	Lecture		
6	Introduction to Experiments	E	장세아	Lecture		
7	Advanced Experimental Design	E	장세아	Lecture		
8	Midterm Exam	E	장세아			
9	How to Design Experiments	E	장세아	Lecture		
10	How to Conduct Experiments	E	장세아	Lecture		
11	How to Interpret Experimental Results	E	장세아	Lecture		
12	How to Report Experimental Results	E	장세아	Lecture		
13	Quasi-Experiments and Small-N Designs	E	장세아	Lecture		
14	Surveys and Observations	E	장세아	Lecture		
15	Group Presentations	E	장세아	Presentation		
16	Final Exam	E	장세아			

11. Other items of notification

Solid Mechanics

Course Name	Course type (credit/hours)	전선(3/3)		Course code	E046
	Target students Division/major/grade	건설시스템공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(팔310) 목B(팔310)(팔310)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	No prerequisite			
	Related basic courses	Statistics			
	Recommanded concurrent courses				
	Related advanced courses	Advanced machine learning course			
Instructor	Name (title/division)	김태용 (조교수/공과대학 건설시스템공학과)			
	Office Room Number	팔달관 511호	Office phone Number	2505	e-mail
	Office hours		Homepage address	resilienceng.wordpress.com	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Recently, it has been observed that the integration of machine learning and proficient programming skills has greatly facilitated the resolution of various engineering problems. While several software solutions have been developed for this purpose, Python has garnered significant attention due to its user-friendly nature and extensive collection of useful modules. In order to showcase how advanced data science methodologies can be applied to solve engineering problems, this course introduces students to the following concepts and techniques:

?Python programming: Students will acquire the necessary skills to program in Python, which serves as a fundamental tool for implementing data science solutions.

?Basic machine learning methods: An overview of essential machine learning algorithms and techniques will be provided. Although detailed discussions will not be the primary focus of this course, students will gain a foundational understanding of how these methods can be utilized to solve engineering problems.

?Database management: The course will cover the principles and practices of working with databases, which are vital for handling and organizing large amounts of data in an engineering context.

?Deep learning: An introduction to deep learning methods will be presented, highlighting their potential for solving complex engineering problems. While in-depth exploration is beyond the scope of this course, students will gain exposure to the capabilities of deep learning.

Designed specifically for second-year undergraduate students, this course aims to reinforce the fundamentals of problem formulation through computer programming and enhance visualization skills, thus laying a solid foundation for more advanced courses in the field.

2. Course Objectives

The course is specifically designed to assist second-year students in acquiring computer coding skills and becoming familiar with data science methodologies. Rather than delving into the intricate details of each method, the course will provide students with a comprehensive framework. Numerous Civil Systems Engineering problems will be introduced to bridge the gap between this course and their major classes, as well as enhance students ability to apply their knowledge to real-world engineering problems. The course aims to achieve the following learning objectives:

- ?Develop a solid understanding of programming, with a particular focus on Python. Students will gain proficiency in Python coding, enabling them to effectively implement solutions to engineering problems.
- ?Learn how to formulate and visualize engineering problems using Python. Students will acquire the skills to translate real-world engineering problems into computational models and effectively visualize their solutions.
- ?Gain a basic understanding of machine learning and deep learning concepts and explore how they can be integrated into real-world civil and mineral engineering problems. Students will learn how to leverage these methodologies to analyze data and make predictions or informed decisions.
- ?Implement database systems within their own code and apply them to engineering problems, especially in scenarios involving large datasets. Students will learn how to handle and manipulate big data efficiently using database systems.

3. Class types and activities

Lecture-based for 45 minutes and practice for the remaining for (almost) every class.
Also flipped learning will be actively used.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

As this course is designed to the second academic year students, there is no critical prerequisite knowledge.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	every class	10	
midterm exam			
final exam	1	25	
quiz	6	30	
presentation			
discussion			
homework	6	10	
etc	1	25	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Ref.	Hands-on machine learning with scikit-learn and TensorFlow: Concepts, tools, and techniques to build intelligent systems	Geron, A.	OReilly Media	2019
Ref.	Introduction to machine learning with Python: A guide for data scientists	Miller, A. C., & Guido, S.	OReilly Media	2016

10. Class system and Class shedule

I will spend the first 4 weeks to teach the introduction to Python. Then, students will practice coding skills by solving various engineering problems before midterm. After that, they will learn basics of machine learning, which is followed by fundamental of database and deep learning.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to Python and machine learning	K	김태용			
2	Python: loop, iteration	K	김태용			
3	Python: function, class	K	김태용			
4	Python: libraries	K	김태용			
5	Failure probability and MCS	K	김태용			
6	Data preprocessing	K	김태용			
7	Multiple linear regression	K	김태용			
8	Midterm	K	김태용			
9	Logistic regression	K	김태용			
10	Clustering	K	김태용			
11	Principal component analysis (PCA)	K	김태용			
12	Introduction to deep learning	K	김태용			
13	Convolutional neural network (CNN)	K	김태용			
14	Term project presentation	K	김태용			
15	Final	K	김태용			
16	Final term project report	K	김태용			

11. Other items of notification

Please refer to the uploaded syllabus file for detailed information.

Solid-State Physics

Course Name	Course type (credit/hours)	전필(3/3)			Course code	G044
	Target students Division/major/grade	물리학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(원502) 수E(원502)(원502)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses	Quantum Mechanics				
	Recommanded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	이형우 (부교수/대학원 에너지시스템학과)				
	Office Room Number	원천관 416호	Office phone Number	2581	e-mail	
	Office hours		Homepage address	https://sites.google.com/view/copl/		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

The physical understanding of various kinds of solids has been developed rapidly since the foundation of quantum mechanics in the early 20th century. Today, solid stae physics is a discipline of physics with the largest number of researchers and is being applied extensively to industries and engineering. The main topic includes the atomic structure of crystals, phonons, free electron gas and the Fermi surface in this course. This course will cover electrical and magnetic properties of metals, semiconductors, dielectrics, and nano-materials.

2. Course Objectives

Students need to understand the basic concepts and theories of solid state physics and acquire an ability to apply them to real physical phenomena observed in nature and in laboratories.

Specifically, students need to understand

1. the atomic structure of crystals
2. the principle of crystal binding
3. elementary excitations in solids including phonons
4. thermodynamics and dynamics of free electrons and the Fermi surface
5. elementary concepts of energy band in semiconductor crystals
6. Nanostructures

3. Class types and activities

The lectures will be provided off-line. The two exams (the mid and the final) will be off-line. If there is any change, it will be notified in advance.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Basic knowledge on classical mechanics, electromagnetism and quantum mechanics is essential.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	매일	10	
midterm exam	1	40	
final exam	1	45	
quiz			
presentation			
discussion			
homework	매주	5	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Introduction to Solid State Physics, 8th Ed.	Charles Kittel	Wiley	2005

10. Class system and Class shedule

<p>The following topics will be covered.</p> <ol style="list-style-type: none"> 1. Crystal structure 2. Crystal diffraction 3. Crystal binding 4. Phonons 5. Free electron Fermi gas 6. Energy bands 7. Semiconductors 8. Fermi surfaces and Metals <p>These are essential topics in solid state physics which every student in physics needs to learn.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Crystal Structure 1	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Crystal Structure 2	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
3	Wave diffraction and the reciprocal lattice 1	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
4	Wave diffraction and the reciprocal lattice 2	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
5	Crystal binding 1	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
6	Crystal binding 2	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
7	Phonons:Crystal vibrations	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
8	Midterm Exam	E	이형우		대면 방식의 지필 고사	
9	Phonons:Thermal properties	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
10	Free electron Fermi gas 1	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
11	Free electron Fermi gas 2	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
12	Energy Band 1	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
13	Energy Band 2	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
14	Semiconductor	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
15	Fermi Surfaces and Metals	E	이형우	온라인 영상강의 및 실시간 화상 강의 혼합		
16	Final Exam	E	이형우		대면 방식의 지필 고사	

11. Other items of notification

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Spanish Language

Course Name	Course type (credit/hours)	교선(3/3)			Course code	X006
	Target students Division/major/grade	/			Opening semester	2024 2ND SEMESTER
	Class time and classroom	수F(성201) 금F(성201)(성201)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommanded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	오윤미 (부교수/인문대학 불어불문학과)				
	Office Room Number	다산관405-2	Office phone Number	3308	e-mail	
	Office hours	Wed E		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course is intended for students who have never learned Spanish and wish to learn it for the first time. The objective of the course is to help them develop basic knowledge and understanding of Spanish language. It will be entirely conducted in English and all students are required to use English (and Spanish) during the class.

This course has to do with "foreign language proficiency" according to competency-based education in our university.

(NB: There wont be a class on Wednesday Sep 11th and an online recorded make-up class will be uploaded during Chuseok.)

2. Course Objectives

This introductory class is designed for students who have not previously studied Spanish language and aims to provide them with opportunities to learn basic knowledge of Spanish language (i.e. pronunciation, vocabulary, expressions) and its culture.

3. Class types and activities

During each class, students will study the pronunciation, grammar, vocabulary, expressions of Spanish language by means of lectures, pairworks and role-playings. Students are expected to be interactive in the classroom. Audio-visual materials will be used to help students to improve their knowledge of Spanish culture and language.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

An interest in Spanish language and culture

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		30%	
final exam		40%	
quiz			
presentation		10%	Presentation in Spanish (e.g. singing a song, reciting a poem, performing a scene of theatre or movie or role-playing)
discussion			
homework			
etc		10%	Participation and performance during the class
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	초급 스페인어 1	신자영, 이만기, 김은경, 라이운 블랑카포르트	서울대학교출판문화원	2013

10. Class system and Class shedule

In this course, students will acquire basic knowledge of Spanish (from its pronunciation to its grammar) in English.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction, Lección inicial. Alfabeto y pronunciación	E	오윤미			
2	Lección 1. Saludos y presentaciones	E	오윤미	No class on Wed Sep 11th, make-up recorded class during Chuseok		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Lección 2. En el aula	E	오윤미			
4	Lección 2. En el aula – Lección 3. ¿De dónde eres?	E	오윤미			
5	Lección 3. ¿De dónde eres?	E	오윤미			
6	Lección 4. En mi casa y en mi barrio	E	오윤미			
7	Lección 4. En mi casa y en mi barrio	E	오윤미			
8	Midterm exam	E	오윤미			
9	Lección 5. La vida universitaria	E	오윤미			
10	Lección 5. La vida universitaria – Lección 6. Esta es mi familia	E	오윤미			
11	Lección 6. Esta es mi familia	E	오윤미			
12	Lección 7. ¡Feliz cumpleaños!	E	오윤미			
13	Presentation	E	오윤미			
14	Lección 7. ¡Feliz cumpleaños! – Lección 8. ¿Qué tiempo hace hoy?	E	오윤미			
15	Lección 8. ¿Qué tiempo hace hoy?	E	오윤미			
16	Final exam	E	오윤미			

11. Other items of notification

The course schedule may be subject to change depending on class progress.

Speaking French

Course Name	Course type (credit/hours)	교선(3/3)		Course code	X098
	Target students Division/major/grade	/		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(성202) 목D(성202)(성202)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommanded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)				
	Office Room Number		Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This class is for students who have never learned French and would like to study it for the first time. The objective of the class will be to develop a beginner level in the four main competences (reading, listening, writing and speaking).

The class will be conducted in French and English.

2. Course Objectives

3. Class types and activities

During each lesson, students will study the pronunciation, grammar, vocabulary, expressions in French and some cultural points of French speaking countries. The class will be organised around a powerpoint for the lecture, and students will practise through pairworks and role plays.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

You dont need prior knowledge to follow this class. You are all welcome to try! :)

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	1 unjustified absence = 2 points / 1 unjustified tardiness = 1 point / If you miss 8 lessons, you get an automatic F
midterm exam		25	Midterms : written test
final exam		25	Finals : speaking test
quiz			
presentation			
discussion			
homework		20	
etc		20	Active participation in class, efforts put in
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Inspire 1 + powerpoints	Jean-Thierry Le BOUGNEC, Marie-Jos? LOPES	Hachette fran?ais langue ?trang?re	2020

10. Class system and Class shedule

<p>In this class, students will acquire a beginner level of French concerning reading, listening, speaking and writing. We will also study cultural points that are useful to life in French speaking countries (in formal and informal settings).</p>
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction and orientation	E	FAYE ANNE CECILE			
2	The alphabet in French, classroom objects and communication,	E	FAYE ANNE CECILE			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	French pronunciation, numbers 0 to 69, and dates	E	FAYE ANNE CECILE			
4	Numbers 0 to 100, names of countries	E	FAYE ANNE CECILE			
5	How to introduce yourself, nationalities,	E	FAYE ANNE CECILE			
6	How to exchange personal information	E	FAYE ANNE CECILE			
7	How to make a hotel reservation, numbers 100 to 1 000 000 000	E	FAYE ANNE CECILE			
8	Midterm exams	E	FAYE ANNE CECILE			
9	How to talk about your family	E	FAYE ANNE CECILE			
10	Physical description and personality	E	FAYE ANNE CECILE			
11	Hobbies, likes and dislikes	E	FAYE ANNE CECILE			
12	Places in the city	E	FAYE ANNE CECILE			
13	Directions in the city	E	FAYE ANNE CECILE			
14	Going out, proposing, accepting or refusing an invitation	E	FAYE ANNE CECILE			
15	Revisions	E	FAYE ANNE CECILE			
16	Final exams	E	FAYE ANNE CECILE			

11. Other items of notification

This class is a good opportunity to discover French as a beginner. You don't need to have a perfect level of French, and everyone is welcome to follow this class.

It is alright to make mistakes, so don't be afraid to make some, this is how everyone learns. :)

I value efforts and hard-work over a perfect use of French.

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X173
	Target students Division/major/grade	공통/공통			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화D(성332) 목C(성332)(성332)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Brad Crawford (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-1	Office phone Number	2816	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

Course Goals

1) Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

2) Students will learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

Course Objectives – English 1 students will be able to:

(1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.

(2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.

(3) Use appropriate vocabulary and grammar to express their ideas about the course topics.

(4) Follow the steps in the writing process.

(5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate chapter in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		20%	
discussion		20%	
homework		20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2: Third edition	Johannsen, Kristen & Tarver, Rebecca	National Geographic Learning	2015

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interview with Instructor	K	Brad Crawford			
2	Class introduction, Get to know your classmates, Chapter 1	K	Brad Crawford			
3	Writing: Paragraph Structure	K	Brad Crawford		Brainstorming Due	
4	Chapter 2	K	Brad Crawford		First Draft Due	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Writing: Paragraph Format *Writing Assignment #1	K	Brad Crawford			
6	Chapter 3	K	Brad Crawford		Final Draft Due	
7	Chapter 4	K	Brad Crawford			
8	Midterm Exam	K	Brad Crawford			
9	Chapter 6	K	Brad Crawford			
10	Chapter 7	K	Brad Crawford			
11	Chapter 10	K	Brad Crawford			
12	Chapter 11	K	Brad Crawford			
13	Chapter 12	K	Brad Crawford		Group Report	
14	Review and wrap-up	K	Brad Crawford			
15	Oral Test	K	Brad Crawford			
16	Final Exam	K	Brad Crawford			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X174
	Target students Division/major/grade	/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(성237) 목A(성237)(성237)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Joshua Houser (조교수/대학 다산학부대학)				
	Office Room Number	성호관 421호	Office phone Number	2844	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course provides students with an opportunity to improve the rreading and listening skills in English. Students will be also able to increase the awareness of other cultures including the North American culture by reading articles about a wide variety ofcurrentissues.

2. Course Objectives

3. Class types and activities

- (1) Students are required to hand in a variety of homework assignments such a summary of the textbook material or a short report on related topics.
- (2) Students are expected to choose a chapter and make a group presentation on a related topic.
- (3) Regular quizzes (four quizzes) will be given in class to ensure that students are learning the course material.
- (4) Students are responsible for attending class regularly. Students must obtain specific information about the material covered in class on the day they were absent and hand in all the homework assignments. Furthermore, unexcused absences will have the following consequences on the students' final score:
- 1 unexcused absence = 0 point reduction
 - 2 unexcused absence = 2 point reduction
 - 3 unexcused absence = 3 point reduction
 - 4 unexcused absence = 4 point reduction
- cf. 2 times late = 1 unexcused absence
arriving more than 20 minutes late = 1 unexcused absence
- (5) Absences are excused only in the case of a medical excuse verified by a doctor's note (prescriptions are not allowed), a military excuse, or a death in the family.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others () | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		20	
final exam		20	
quiz		30	
presentation		10	
discussion		10	
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	World English 2 Third Edition	Martin Milner	Cengage Learning	2014

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	course intro	K	Joshua Houser			
2	Chapter 1 (Reading 1)	K	Joshua Houser			
3	Chapter 1 (Reading 3)	K	Joshua Houser			
4	Chapter 2 (Reading 1)	K	Joshua Houser			
5	Chapter 2 (Reading 2)	K	Joshua Houser			
6	Chapter 3 (Reading 1/2)	K	Joshua Houser			
7	Chapter 4 (Reading 2)	K	Joshua Houser			
8	mid-term exam	K	Joshua Houser			
9	Chapter 5 (Reading 1)	K	Joshua Houser			
10	Chapter 5 (Reading 2)	K	Joshua Houser			
11	Chapter 6 (Reading 1)	K	Joshua Houser			
12	Chapter 6 (Reading 2)	K	Joshua Houser			
13	Chapter 7 (Reading 1)	K	Joshua Houser			
14	Chapter 7 (Reading 2)	K	Joshua Houser			
15	Chapter 9 (Reading 2)	K	Joshua Houser			
16	final exam	K	Joshua Houser			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X175
	Target students Division/major/grade	영어영문학과/Freshmen			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(성436) 목B(성436)(성436)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommanded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Kevin Hawthorne (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	2830	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

English Communication for English Majors (ECEM) is designed for students who have a high-intermediate level of English or above. The focus of this course is on improving students abilities to have meaningful discussions about serious topics. A wide variety of readings provide useful language examples, and stimulate interest in the topics and themes. Students are expected to actively participate in class small-group discussions, debates, and presentations based on the issues raised in the class material

3. Class types and activities

Speaking lessons include pair work, small group discussions, class discussions and task-based communicative activities. There are three main speaking assignments: A group presentation, a special seminar, and an impromptu debate.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

A high-intermediate to advanced level of English is assumed for students of ECEM

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		30%	
discussion		10%	
homework			
etc		20%	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	Small Group Discussion Topics for Korean Students, A Modern Approach to Fluency in English,	Jack Martire	PNU Press	2013
Main	Instructor will provide additional materials			

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction and Syllabus		Kevin Hawthorne	face-to-face		
2	Issues 1 & 2		Kevin Hawthorne	face-to-face		
3	Issues 3 & 4		Kevin Hawthorne	face-to-face		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Issues 5 & 6		Kevin Hawthorne	face-to-face		
5	Group Presentations		Kevin Hawthorne	face-to-face		
6	Issues 7 & 8		Kevin Hawthorne	face-to-face		
7	Issue 9 & midterm review		Kevin Hawthorne	face-to-face		
8	Midterm Exam		Kevin Hawthorne	face-to-face		
9	Issues 10 & 11		Kevin Hawthorne	face-to-face		
10	Issues 12 & 13		Kevin Hawthorne	face-to-face		
11	Issues 14 & 15		Kevin Hawthorne	face-to-face		
12	Individual Seminars		Kevin Hawthorne	face-to-face		
13	Issues 16 & 17		Kevin Hawthorne	face-to-face		
14	Issues 18 & review		Kevin Hawthorne	face-to-face		
15	Impromptu Debates (Oral Test)		Kevin Hawthorne	face-to-face		
16	Final Exam		Kevin Hawthorne	face-to-face		

11. Other items of notification

English Communication for English Majors (E.C.E.M.) will be taught face-to-face if Covid-19 conditions allow. Be prepared to attend classes on campus in the classroom. However, if conditions change, it may be necessary to deliver part or all of the course online. Therefore, please also be prepared to participate online using Zoom if this becomes necessary.

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X176
	Target students Division/major/grade	1st Year/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(다506) 목B(다506)(다506)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Donald Hearn (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-2호	Office phone Number	2817	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade; 3 absences = 4 points off; 4 absences = 6 points off; 5 absences = 4 points off; 6 unexcused absences = F
midterm exam		15%	Midterm Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete a final oral test which will evaluate each student's speaking skills in an unscripted conversation or interview.
discussion		20%	Participation: Students are expected to speak English during class time and to complete all in-class tasks as well as homework assignments.
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organization of the paragraph, adequate development of the subject and proper formatting.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction and syllabus; Classroom English	E	Donald Hearn	대면		
2	Formal English	E	Donald Hearn	대면		
3	Unit 1 – Food from the Earth	E	Donald Hearn	대면		
4	Formal English, sentence-level correction & editing	E	Donald Hearn	대면		
5	Unit 2 – Express Yourself	E	Donald Hearn	대면		
6	Paragraph formatting, structure	E	Donald Hearn	대면		
7	Unit 2 – Express Yourself	E	Donald Hearn	대면		
8	MID-TERM EXAM	E	Donald Hearn	대면		
9	Unit 3 – Cities	E	Donald Hearn	대면		
10	Paragraph structure – Supporting sentences	E	Donald Hearn	대면		
11	Unit 3 – Cities	E	Donald Hearn	대면		
12	Unit 4 – The Body	E	Donald Hearn	대면		
13	Unit 4 – The Body	E	Donald Hearn	대면		
14	Unit 5 – Challenges	E	Donald Hearn	대면		
15	Review	E	Donald Hearn	대면		
16	FINAL EXAM	E	Donald Hearn	대면		

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X177
	Target students Division/major/grade	공통/공통			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(다B109) 목B(다B109)(다B109)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Brad Crawford (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-1	Office phone Number	2816	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

Course Goals

1) Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

2) Students will learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

Course Objectives – English 1 students will be able to:

(1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.

(2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.

(3) Use appropriate vocabulary and grammar to express their ideas about the course topics.

(4) Follow the steps in the writing process.

(5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate chapter in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		20%	
discussion		20%	
homework		20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2: Third edition	Johannsen, Kristen & Tarver, Rebecca	National Geographic Learning	2015

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interview with Instructor	K	Brad Crawford			
2	Class introduction, Get to know your classmates, Chapter 1	K	Brad Crawford			
3	Writing: Paragraph Structure	K	Brad Crawford		Brainstorming Due	
4	Chapter 2	K	Brad Crawford		First Draft Due	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Writing: Paragraph Format *Writing Assignment #1	K	Brad Crawford			
6	Chapter 3	K	Brad Crawford		Final Draft Due	
7	Chapter 4	K	Brad Crawford			
8	Midterm Exam	K	Brad Crawford			
9	Chapter 6	K	Brad Crawford			
10	Chapter 7	K	Brad Crawford			
11	Chapter 10	K	Brad Crawford			
12	Chapter 11	K	Brad Crawford			
13	Chapter 12	K	Brad Crawford		Group Report	
14	Review and wrap-up	K	Brad Crawford			
15	Oral Test	K	Brad Crawford			
16	Final Exam	K	Brad Crawford			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X178
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(성201-1) 목B(성201-1)(성201-1)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Scott Scattergood (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	1824	e-mail	
	Office hours	Mon, Wed, Thur: 1:30 - 2:00; Friday: 6-7 PM		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics.
- (4) Follow the steps in the writing process.
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence.
- (6) Write using complete sentences, avoiding fragments and run-on sentences.
- (7) Write using capital letters, periods and commas correctly.
- (8) Write with acceptable academic style and proper paragraph format.

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook or the material in the Lectures Notes section of Blackboard.

수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 absences = 2 points off; 3 absences = 4 points off; 4 absences = 6 points off...
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews / pronunciation	E	Scott Scattergood			
2	Conversations	E	Scott Scattergood			
3	Writing Part 1	E	Scott Scattergood			
4	Writing Part 2	E	Scott Scattergood			
5	Unit 1 – Food for Life	E	Scott Scattergood			
6	Unit 2 Express Yourself	E	Scott Scattergood			
7	Unit 3 Cities	E	Scott Scattergood			
8	MID-TERM EXAM	E	Scott Scattergood			
9	Speaking Test preparation	E	Scott Scattergood			
10	Midterm Speaking Test	E	Scott Scattergood			
11	Unit 4 The Body	E	Scott Scattergood			
12	Advice	E	Scott Scattergood			
13	Unit 8 – Conservation	E	Scott Scattergood			
14	Conditional Sentences	E	Scott Scattergood			
15	Review and Final Speaking Test	E	Scott Scattergood			
16	FINAL EXAM	E	Scott Scattergood			

11. Other items of notification

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Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)	Course code	X179
	Target students Division/major/grade	Freshmen/1학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(성237) 목B(성237)(성237)	English Grade	A(100%English)
Reference to this course	Prerequisite courses			
	Related basic courses			
	Recommended concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)		Joseph Ball (조교수/대학 다산학부대학)		
	Office Room Number	성호관421호	Office phone Number	2846	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2015	

10. Class system and Class shedule

<p>We will do the Writing Booklet first, then the textbook along with the Grammar Booklet for extra review.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews	E	Joseph Ball	Online & Video		
2	Unit 1 – Food from the Earth	E	Joseph Ball	Online & Video		
3	Unit 2 – Express Yourself	E	Joseph Ball	Online & Video		
4	Unit 3 – Cities	E	Joseph Ball	Online & Video		
5	Unit 4 – The Body	E	Joseph Ball	Online & Video		
6	Unit 5 – Challenges	E	Joseph Ball	Online & Video		
7	Unit 6 – Transitions	E	Joseph Ball	Online & Video		
8	MID-TERM EXAM	E	Joseph Ball	Online & Video		
9	Unit 7 – Luxuries	E	Joseph Ball	Online & Video		
10	Unit 8 – Nature	E	Joseph Ball	Online & Video		
11	Unit 9 – Life in the Past	E	Joseph Ball	Online & Video		
12	Unit 10 – Travel	E	Joseph Ball	Online & Video		
13	Unit 11 – Careers	E	Joseph Ball	Online & Video		
14	Unit 12 – Celebrations	E	Joseph Ball	Online & Video		
15	Review	E	Joseph Ball	Online & Video		
16	FINAL EXAM	E	Joseph Ball	Online & Video		

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X180
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(성334) 목B(성334)(성334)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Nicholas McGhie (조교수/대학 다산학부대학)				
	Office Room Number	성호관 419호	Office phone Number	031-219-3256	e-mail	
	Office hours	24-7 Online FB Messenger		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 3 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2015	

10. Class system and Class shedule

We will do the Writing Booklet first, then the textbook along with the Grammar Booklet for extra review.
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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews	E	Nicholas McGhie	Online & Video		
2	Unit 1 – Food from the Earth	E	Nicholas McGhie	Online & Video		
3	Unit 2 – Express Yourself	E	Nicholas McGhie	Online & Video		
4	Unit 3 – Cities	E	Nicholas McGhie	Online & Video		
5	Unit 4 – The Body	E	Nicholas McGhie	Online & Video		
6	Unit 5 – Challenges	E	Nicholas McGhie	Online & Video		
7	Unit 6 – Transitions	E	Nicholas McGhie	Online & Video		
8	MID-TERM EXAM	E	Nicholas McGhie	Online & Video		
9	Unit 7 – Luxuries	E	Nicholas McGhie	Online & Video		
10	Unit 8 – Nature	E	Nicholas McGhie	Online & Video		
11	Unit 9 – Life in the Past	E	Nicholas McGhie	Online & Video		
12	Unit 10 – Travel	E	Nicholas McGhie	Online & Video		
13	Unit 11 – Careers	E	Nicholas McGhie	Online & Video		
14	Unit 12 – Celebrations	E	Nicholas McGhie	Online & Video		
15	Review	E	Nicholas McGhie	Online & Video		
16	FINAL EXAM	E	Nicholas McGhie	Online & Video		

11. Other items of notification

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Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)	Course code	X182
	Target students Division/major/grade	Freshmen/1학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(성201) 수A(성201)(성201)	English Grade	A(100%English)
Reference to this course	Prerequisite courses			
	Related basic courses			
	Recommended concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)		Kevin Hawthorne (조교수/대학 다산학부대학)		
	Office Room Number	성호관420호	Office phone Number	2830	e-mail
	Office hours	화3:00-4:30, 수3:00-4:30	Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2020	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction	E	Kevin Hawthorne	face-to-face		
2	Unit 1 – Food from the Earth	E	Kevin Hawthorne	face-to-face		
3	Unit 2 – Express Yourself	E	Kevin Hawthorne	face-to-face		
4	Unit 3 – Cities	E	Kevin Hawthorne	face-to-face		
5	Unit 4 – The Body	E	Kevin Hawthorne	face-to-face		
6	Unit 5 – Challenges	E	Kevin Hawthorne	face-to-face		
7	Unit 6 – Transitions	E	Kevin Hawthorne	face-to-face		
8	MID-TERM EXAM	E	Kevin Hawthorne	face-to-face		
9	Unit 7 – Luxuries	E	Kevin Hawthorne	face-to-face		
10	Unit 8 – Nature	E	Kevin Hawthorne	face-to-face		
11	Unit 9 – Life in the Past	E	Kevin Hawthorne	face-to-face		
12	Unit 10 – Travel	E	Kevin Hawthorne	face-to-face		
13	Unit 11 – Careers	E	Kevin Hawthorne	face-to-face		
14	Unit 12 – Celebrations	E	Kevin Hawthorne	face-to-face		
15	Review	E	Kevin Hawthorne	face-to-face		
16	FINAL EXAM	E	Kevin Hawthorne	face-to-face		

11. Other items of notification

English 1 will be taught face-to-face in the classroom this semester (unless there is a policy change). Please be prepared to attend class, and to carefully follow all necessary Covid-19 safety measures.

(If there is a policy change, students will be notified)

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X183
	Target students Division/major/grade	1st Year/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(다B109) 수A(다B109)(다B109)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Donald Hearn (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-2호	Office phone Number	2817	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade; 3 absences = 4 points off; 4 absences = 6 points off; 5 absences = 4 points off; 6 unexcused absences = F
midterm exam		15%	Midterm Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete a final oral test which will evaluate each student's speaking skills in an unscripted conversation or interview.
discussion		20%	Participation: Students are expected to speak English during class time and to complete all in-class tasks as well as homework assignments.
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organization of the paragraph, adequate development of the subject and proper formatting.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction and syllabus; Classroom English	E	Donald Hearn	대면		
2	Formal English	E	Donald Hearn	대면		
3	Unit 1 – Food from the Earth	E	Donald Hearn	대면		
4	Formal English, sentence-level correction & editing	E	Donald Hearn	대면		
5	Unit 2 – Express Yourself	E	Donald Hearn	대면		
6	Paragraph formatting, structure	E	Donald Hearn	대면		
7	Unit 2 – Express Yourself	E	Donald Hearn	대면		
8	MID-TERM EXAM	E	Donald Hearn	대면		
9	Unit 3 – Cities	E	Donald Hearn	대면		
10	Paragraph structure – Supporting sentences	E	Donald Hearn	대면		
11	Unit 3 – Cities	E	Donald Hearn	대면		
12	Unit 4 – The Body	E	Donald Hearn	대면		
13	Unit 4 – The Body	E	Donald Hearn	대면		
14	Unit 5 – Challenges	E	Donald Hearn	대면		
15	Review	E	Donald Hearn	대면		
16	FINAL EXAM	E	Donald Hearn	대면		

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X184
	Target students Division/major/grade	1st Year/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월E(다506) 수E(다506)(다506)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Donald Hearn (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-2호	Office phone Number	2817	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade; 3 absences = 4 points off; 4 absences = 6 points off; 5 absences = 4 points off; 6 unexcused absences = F
midterm exam		15%	Midterm Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete a final oral test which will evaluate each student's speaking skills in an unscripted conversation or interview.
discussion		20%	Participation: Students are expected to speak English during class time and to complete all in-class tasks as well as homework assignments.
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organization of the paragraph, adequate development of the subject and proper formatting.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction and syllabus; Classroom English	E	Donald Hearn	대면		
2	Formal English	E	Donald Hearn	대면		
3	Unit 1 – Food from the Earth	E	Donald Hearn	대면		
4	Formal English, sentence-level correction & editing	E	Donald Hearn	대면		
5	Unit 2 – Express Yourself	E	Donald Hearn	대면		
6	Paragraph formatting, structure	E	Donald Hearn	대면		
7	Unit 2 – Express Yourself	E	Donald Hearn	대면		
8	MID-TERM EXAM	E	Donald Hearn	대면		
9	Unit 3 – Cities	E	Donald Hearn	대면		
10	Paragraph structure – Supporting sentences	E	Donald Hearn	대면		
11	Unit 3 – Cities	E	Donald Hearn	대면		
12	Unit 4 – The Body	E	Donald Hearn	대면		
13	Unit 4 – The Body	E	Donald Hearn	대면		
14	Unit 5 – Challenges	E	Donald Hearn	대면		
15	Review	E	Donald Hearn	대면		
16	FINAL EXAM	E	Donald Hearn	대면		

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X185
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(성333) 수A(성333)(성333)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Scott Scattergood (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	1824	e-mail	
	Office hours	Mon, Wed, Thur: 1:30 - 2:00; Friday: 6-7 PM		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics.
- (4) Follow the steps in the writing process.
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence.
- (6) Write using complete sentences, avoiding fragments and run-on sentences.
- (7) Write using capital letters, periods and commas correctly.
- (8) Write with acceptable academic style and proper paragraph format.

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook or the material in the Lectures Notes section of Blackboard.

수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 absences = 2 points off; 3 absences = 4 points off; 4 absences = 6 points off...
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews / pronunciation	E	Scott Scattergood			
2	Conversations	E	Scott Scattergood			
3	Writing Part 1	E	Scott Scattergood			
4	Writing Part 2	E	Scott Scattergood			
5	Unit 1 – Food for Life	E	Scott Scattergood			
6	Unit 2 Express Yourself	E	Scott Scattergood			
7	Unit 3 Cities	E	Scott Scattergood			
8	MID-TERM EXAM	E	Scott Scattergood			
9	Speaking Test preparation	E	Scott Scattergood			
10	Midterm Speaking Test	E	Scott Scattergood			
11	Unit 4 The Body	E	Scott Scattergood			
12	Advice	E	Scott Scattergood			
13	Unit 8 – Conservation	E	Scott Scattergood			
14	Conditional Sentences	E	Scott Scattergood			
15	Review and Final Speaking Test	E	Scott Scattergood			
16	FINAL EXAM	E	Scott Scattergood			

11. Other items of notification

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Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)	Course code	X186
	Target students Division/major/grade	Freshmen/1학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(성236) 수A(성236)(성236)	English Grade	A(100%English)
Reference to this course	Prerequisite courses			
	Related basic courses			
	Recommended concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)		Joseph Ball (조교수/대학 다산학부대학)		
	Office Room Number	성호관421호	Office phone Number	2846	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2015	

10. Class system and Class shedule

<p>We will do the Writing Booklet first, then the textbook along with the Grammar Booklet for extra review.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews	E	Joseph Ball	Online & Video		
2	Unit 1 – Food from the Earth	E	Joseph Ball	Online & Video		
3	Unit 2 – Express Yourself	E	Joseph Ball	Online & Video		
4	Unit 3 – Cities	E	Joseph Ball	Online & Video		
5	Unit 4 – The Body	E	Joseph Ball	Online & Video		
6	Unit 5 – Challenges	E	Joseph Ball	Online & Video		
7	Unit 6 – Transitions	E	Joseph Ball	Online & Video		
8	MID-TERM EXAM	E	Joseph Ball	Online & Video		
9	Unit 7 – Luxuries	E	Joseph Ball	Online & Video		
10	Unit 8 – Nature	E	Joseph Ball	Online & Video		
11	Unit 9 – Life in the Past	E	Joseph Ball	Online & Video		
12	Unit 10 – Travel	E	Joseph Ball	Online & Video		
13	Unit 11 – Careers	E	Joseph Ball	Online & Video		
14	Unit 12 – Celebrations	E	Joseph Ball	Online & Video		
15	Review	E	Joseph Ball	Online & Video		
16	FINAL EXAM	E	Joseph Ball	Online & Video		

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X187
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(성201-1) 수A(성201-1)(성201-1)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Nicholas McGhie (조교수/대학 다산학부대학)				
	Office Room Number	성호관 419호	Office phone Number	031-219-3256	e-mail	
	Office hours	24-7 Online FB Messenger		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 3 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2015	

10. Class system and Class shedule

<p>We will do the Writing Booklet first, then the textbook along with the Grammar Booklet for extra review.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews	E	Nicholas McGhie	Online & Video		
2	Unit 1 – Food from the Earth	E	Nicholas McGhie	Online & Video		
3	Unit 2 – Express Yourself	E	Nicholas McGhie	Online & Video		
4	Unit 3 – Cities	E	Nicholas McGhie	Online & Video		
5	Unit 4 – The Body	E	Nicholas McGhie	Online & Video		
6	Unit 5 – Challenges	E	Nicholas McGhie	Online & Video		
7	Unit 6 – Transitions	E	Nicholas McGhie	Online & Video		
8	MID-TERM EXAM	E	Nicholas McGhie	Online & Video		
9	Unit 7 – Luxuries	E	Nicholas McGhie	Online & Video		
10	Unit 8 – Nature	E	Nicholas McGhie	Online & Video		
11	Unit 9 – Life in the Past	E	Nicholas McGhie	Online & Video		
12	Unit 10 – Travel	E	Nicholas McGhie	Online & Video		
13	Unit 11 – Careers	E	Nicholas McGhie	Online & Video		
14	Unit 12 – Celebrations	E	Nicholas McGhie	Online & Video		
15	Review	E	Nicholas McGhie	Online & Video		
16	FINAL EXAM	E	Nicholas McGhie	Online & Video		

11. Other items of notification

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Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X189
	Target students Division/major/grade	공통/공통			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(다506) 수A(다506)(다506)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Brad Crawford (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-1	Office phone Number	2816	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

Course Goals

1) Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

2) Students will learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

Course Objectives – English 1 students will be able to:

(1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.

(2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.

(3) Use appropriate vocabulary and grammar to express their ideas about the course topics.

(4) Follow the steps in the writing process.

(5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate chapter in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		20%	
discussion		20%	
homework		20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2: Third edition	Johannsen, Kristen & Tarver, Rebecca	National Geographic Learning	2015

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interview with Instructor	K	Brad Crawford			
2	Class introduction, Get to know your classmates, Chapter 1	K	Brad Crawford			
3	Writing: Paragraph Structure	K	Brad Crawford		Brainstorming Due	
4	Chapter 2	K	Brad Crawford		First Draft Due	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Writing: Paragraph Format *Writing Assignment #1	K	Brad Crawford			
6	Chapter 3	K	Brad Crawford		Final Draft Due	
7	Chapter 4	K	Brad Crawford			
8	Midterm Exam	K	Brad Crawford			
9	Chapter 6	K	Brad Crawford			
10	Chapter 7	K	Brad Crawford			
11	Chapter 10	K	Brad Crawford			
12	Chapter 11	K	Brad Crawford			
13	Chapter 12	K	Brad Crawford		Group Report	
14	Review and wrap-up	K	Brad Crawford			
15	Oral Test	K	Brad Crawford			
16	Final Exam	K	Brad Crawford			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X190
	Target students Division/major/grade	/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월A(성 105) 수A(성 105)(성 105)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Joshua Houser (조교수/대학 다산학부대학)				
	Office Room Number	성호관 421호	Office phone Number	2844	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course provides students with an opportunity to improve the rreading and listening skills in English. Students will be also able to increase the awareness of other cultures including the North American culture by reading articles about a wide variety ofcurrentissues.

2. Course Objectives

3. Class types and activities

- (1) Students are required to hand in a variety of homework assignments such a summary of the textbook material or a short report on related topics.
- (2) Students are expected to choose a chapter and make a group presentation on a related topic.
- (3) Regular quizzes (four quizzes) will be given in class to ensure that students are learning the course material.
- (4) Students are responsible for attending class regularly. Students must obtain specific information about the material covered in class on the day they were absent and hand in all the homework assignments. Furthermore, unexcused absences will have the following consequences on the students' final score:
- 1 unexcused absence = 0 point reduction
 - 2 unexcused absence = 2 point reduction
 - 3 unexcused absence = 3 point reduction
 - 4 unexcused absence = 4 point reduction
- cf. 2 times late = 1 unexcused absence
arriving more than 20 minutes late = 1 unexcused absence
- (5) Absences are excused only in the case of a medical excuse verified by a doctor's note (prescriptions are not allowed), a military excuse, or a death in the family.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others () | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		20	
final exam		20	
quiz		30	
presentation		10	
discussion		10	
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	World English 2 Third Edition	Martin Milner	Cengage Learning	2014

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	course intro	K	Joshua Houser			
2	Chapter 1 (Reading 1)	K	Joshua Houser			
3	Chapter 1 (Reading 3)	K	Joshua Houser			
4	Chapter 2 (Reading 1)	K	Joshua Houser			
5	Chapter 2 (Reading 2)	K	Joshua Houser			
6	Chapter 3 (Reading 1/2)	K	Joshua Houser			
7	Chapter 4 (Reading 2)	K	Joshua Houser			
8	mid-term exam	K	Joshua Houser			
9	Chapter 5 (Reading 1)	K	Joshua Houser			
10	Chapter 5 (Reading 2)	K	Joshua Houser			
11	Chapter 6 (Reading 1)	K	Joshua Houser			
12	Chapter 6 (Reading 2)	K	Joshua Houser			
13	Chapter 7 (Reading 1)	K	Joshua Houser			
14	Chapter 7 (Reading 2)	K	Joshua Houser			
15	Chapter 9 (Reading 2)	K	Joshua Houser			
16	final exam	K	Joshua Houser			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X191
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(성 104) 수C(성 104)(성 104)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Kevin Hawthorne (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	2830	e-mail	
	Office hours	화3:00-4:30, 수3:00-4:30		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2020	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction	E	Kevin Hawthorne	face-to-face		
2	Unit 1 – Food from the Earth	E	Kevin Hawthorne	face-to-face		
3	Unit 2 – Express Yourself	E	Kevin Hawthorne	face-to-face		
4	Unit 3 – Cities	E	Kevin Hawthorne	face-to-face		
5	Unit 4 – The Body	E	Kevin Hawthorne	face-to-face		
6	Unit 5 – Challenges	E	Kevin Hawthorne	face-to-face		
7	Unit 6 – Transitions	E	Kevin Hawthorne	face-to-face		
8	MID-TERM EXAM	E	Kevin Hawthorne	face-to-face		
9	Unit 7 – Luxuries	E	Kevin Hawthorne	face-to-face		
10	Unit 8 – Nature	E	Kevin Hawthorne	face-to-face		
11	Unit 9 – Life in the Past	E	Kevin Hawthorne	face-to-face		
12	Unit 10 – Travel	E	Kevin Hawthorne	face-to-face		
13	Unit 11 – Careers	E	Kevin Hawthorne	face-to-face		
14	Unit 12 – Celebrations	E	Kevin Hawthorne	face-to-face		
15	Review	E	Kevin Hawthorne	face-to-face		
16	FINAL EXAM	E	Kevin Hawthorne	face-to-face		

11. Other items of notification

English 1 will be taught face-to-face in the classroom this semester (unless there is a policy change). Please be prepared to attend class, and to carefully follow all necessary Covid-19 safety measures.

(If there is a policy change, students will be notified)

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X192
	Target students Division/major/grade	1st Year/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(다B109) 수C(다B109)(다B109)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Donald Hearn (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-2호	Office phone Number	2817	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade; 3 absences = 4 points off; 4 absences = 6 points off; 5 absences = 4 points off; 6 unexcused absences = F
midterm exam		15%	Midterm Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete a final oral test which will evaluate each student's speaking skills in an unscripted conversation or interview.
discussion		20%	Participation: Students are expected to speak English during class time and to complete all in-class tasks as well as homework assignments.
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organization of the paragraph, adequate development of the subject and proper formatting.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction and syllabus; Classroom English	E	Donald Hearn	대면		
2	Formal English	E	Donald Hearn	대면		
3	Unit 1 – Food from the Earth	E	Donald Hearn	대면		
4	Formal English, sentence-level correction & editing	E	Donald Hearn	대면		
5	Unit 2 – Express Yourself	E	Donald Hearn	대면		
6	Paragraph formatting, structure	E	Donald Hearn	대면		
7	Unit 2 – Express Yourself	E	Donald Hearn	대면		
8	MID-TERM EXAM	E	Donald Hearn	대면		
9	Unit 3 – Cities	E	Donald Hearn	대면		
10	Paragraph structure – Supporting sentences	E	Donald Hearn	대면		
11	Unit 3 – Cities	E	Donald Hearn	대면		
12	Unit 4 – The Body	E	Donald Hearn	대면		
13	Unit 4 – The Body	E	Donald Hearn	대면		
14	Unit 5 – Challenges	E	Donald Hearn	대면		
15	Review	E	Donald Hearn	대면		
16	FINAL EXAM	E	Donald Hearn	대면		

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X193
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(성236) 수C(성236)(성236)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Scott Scattergood (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	1824	e-mail	
	Office hours	Mon, Wed, Thur: 1:30 - 2:00; Friday: 6-7 PM		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics.
- (4) Follow the steps in the writing process.
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence.
- (6) Write using complete sentences, avoiding fragments and run-on sentences.
- (7) Write using capital letters, periods and commas correctly.
- (8) Write with acceptable academic style and proper paragraph format.

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook or the material in the Lectures Notes section of Blackboard.

수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 absences = 2 points off; 3 absences = 4 points off; 4 absences = 6 points off...
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews / pronunciation	E	Scott Scattergood			
2	Conversations	E	Scott Scattergood			
3	Writing Part 1	E	Scott Scattergood			
4	Writing Part 2	E	Scott Scattergood			
5	Unit 1 – Food for Life	E	Scott Scattergood			
6	Unit 2 Express Yourself	E	Scott Scattergood			
7	Unit 3 Cities	E	Scott Scattergood			
8	MID-TERM EXAM	E	Scott Scattergood			
9	Speaking Test preparation	E	Scott Scattergood			
10	Midterm Speaking Test	E	Scott Scattergood			
11	Unit 4 The Body	E	Scott Scattergood			
12	Advice	E	Scott Scattergood			
13	Unit 8 – Conservation	E	Scott Scattergood			
14	Conditional Sentences	E	Scott Scattergood			
15	Review and Final Speaking Test	E	Scott Scattergood			
16	FINAL EXAM	E	Scott Scattergood			

11. Other items of notification

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Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X194
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(성233) 수C(성233)(성233)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Nicholas McGhie (조교수/대학 다산학부대학)				
	Office Room Number	성호관 419호	Office phone Number	031-219-3256	e-mail	
	Office hours	24-7 Online FB Messenger		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 3 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2015	

10. Class system and Class shedule

<p>We will do the Writing Booklet first, then the textbook along with the Grammar Booklet for extra review.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews	E	Nicholas McGhie	Online & Video		
2	Unit 1 – Food from the Earth	E	Nicholas McGhie	Online & Video		
3	Unit 2 – Express Yourself	E	Nicholas McGhie	Online & Video		
4	Unit 3 – Cities	E	Nicholas McGhie	Online & Video		
5	Unit 4 – The Body	E	Nicholas McGhie	Online & Video		
6	Unit 5 – Challenges	E	Nicholas McGhie	Online & Video		
7	Unit 6 – Transitions	E	Nicholas McGhie	Online & Video		
8	MID-TERM EXAM	E	Nicholas McGhie	Online & Video		
9	Unit 7 – Luxuries	E	Nicholas McGhie	Online & Video		
10	Unit 8 – Nature	E	Nicholas McGhie	Online & Video		
11	Unit 9 – Life in the Past	E	Nicholas McGhie	Online & Video		
12	Unit 10 – Travel	E	Nicholas McGhie	Online & Video		
13	Unit 11 – Careers	E	Nicholas McGhie	Online & Video		
14	Unit 12 – Celebrations	E	Nicholas McGhie	Online & Video		
15	Review	E	Nicholas McGhie	Online & Video		
16	FINAL EXAM	E	Nicholas McGhie	Online & Video		

11. Other items of notification

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Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X195
	Target students Division/major/grade	/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(성333) 목D(성333)(성333)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Joshua Houser (조교수/대학 다산학부대학)				
	Office Room Number	성호관 421호	Office phone Number	2844	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course provides students with an opportunity to improve the rreading and listening skills in English. Students will be also able to increase the awareness of other cultures including the North American culture by reading articles about a wide variety ofcurrentissues.

2. Course Objectives

3. Class types and activities

- (1) Students are required to hand in a variety of homework assignments such a summary of the textbook material or a short report on related topics.
- (2) Students are expected to choose a chapter and make a group presentation on a related topic.
- (3) Regular quizzes (four quizzes) will be given in class to ensure that students are learning the course material.
- (4) Students are responsible for attending class regularly. Students must obtain specific information about the material covered in class on the day they were absent and hand in all the homework assignments. Furthermore, unexcused absences will have the following consequences on the students' final score:
- 1 unexcused absence = 0 point reduction
 - 2 unexcused absence = 2 point reduction
 - 3 unexcused absence = 3 point reduction
 - 4 unexcused absence = 4 point reduction
- cf. 2 times late = 1 unexcused absence
arriving more than 20 minutes late = 1 unexcused absence
- (5) Absences are excused only in the case of a medical excuse verified by a doctor's note (prescriptions are not allowed), a military excuse, or a death in the family.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others () | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		20	
final exam		20	
quiz		30	
presentation		10	
discussion		10	
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	World English 2 Third Edition	Martin Milner	Cengage Learning	2014

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	course intro	K	Joshua Houser			
2	Chapter 1 (Reading 1)	K	Joshua Houser			
3	Chapter 1 (Reading 3)	K	Joshua Houser			
4	Chapter 2 (Reading 1)	K	Joshua Houser			
5	Chapter 2 (Reading 2)	K	Joshua Houser			
6	Chapter 3 (Reading 1/2)	K	Joshua Houser			
7	Chapter 4 (Reading 2)	K	Joshua Houser			
8	mid-term exam	K	Joshua Houser			
9	Chapter 5 (Reading 1)	K	Joshua Houser			
10	Chapter 5 (Reading 2)	K	Joshua Houser			
11	Chapter 6 (Reading 1)	K	Joshua Houser			
12	Chapter 6 (Reading 2)	K	Joshua Houser			
13	Chapter 7 (Reading 1)	K	Joshua Houser			
14	Chapter 7 (Reading 2)	K	Joshua Houser			
15	Chapter 9 (Reading 2)	K	Joshua Houser			
16	final exam	K	Joshua Houser			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X196
	Target students Division/major/grade	/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(성234) 수C(성234)(성234)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Joshua Houser (조교수/대학 다산학부대학)				
	Office Room Number	성호관 421호	Office phone Number	2844	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course provides students with an opportunity to improve the rreading and listening skills in English. Students will be also able to increase the awareness of other cultures including the North American culture by reading articles about a wide variety ofcurrentissues.

2. Course Objectives

3. Class types and activities

- (1) Students are required to hand in a variety of homework assignments such a summary of the textbook material or a short report on related topics.
- (2) Students are expected to choose a chapter and make a group presentation on a related topic.
- (3) Regular quizzes (four quizzes) will be given in class to ensure that students are learning the course material.
- (4) Students are responsible for attending class regularly. Students must obtain specific information about the material covered in class on the day they were absent and hand in all the homework assignments. Furthermore, unexcused absences will have the following consequences on the students' final score:
- 1 unexcused absence = 0 point reduction
 - 2 unexcused absence = 2 point reduction
 - 3 unexcused absence = 3 point reduction
 - 4 unexcused absence = 4 point reduction
- cf. 2 times late = 1 unexcused absence
arriving more than 20 minutes late = 1 unexcused absence
- (5) Absences are excused only in the case of a medical excuse verified by a doctor's note (prescriptions are not allowed), a military excuse, or a death in the family.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input checked="" type="checkbox"/> others () | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

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8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		20	
final exam		20	
quiz		30	
presentation		10	
discussion		10	
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	World English 2 Third Edition	Martin Milner	Cengage Learning	2014

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	course intro	K	Joshua Houser			
2	Chapter 1 (Reading 1)	K	Joshua Houser			
3	Chapter 1 (Reading 3)	K	Joshua Houser			
4	Chapter 2 (Reading 1)	K	Joshua Houser			
5	Chapter 2 (Reading 2)	K	Joshua Houser			
6	Chapter 3 (Reading 1/2)	K	Joshua Houser			
7	Chapter 4 (Reading 2)	K	Joshua Houser			
8	mid-term exam	K	Joshua Houser			
9	Chapter 5 (Reading 1)	K	Joshua Houser			
10	Chapter 5 (Reading 2)	K	Joshua Houser			
11	Chapter 6 (Reading 1)	K	Joshua Houser			
12	Chapter 6 (Reading 2)	K	Joshua Houser			
13	Chapter 7 (Reading 1)	K	Joshua Houser			
14	Chapter 7 (Reading 2)	K	Joshua Houser			
15	Chapter 9 (Reading 2)	K	Joshua Houser			
16	final exam	K	Joshua Houser			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X197
	Target students Division/major/grade	공통/공통			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(다506) 수C(다506)(다506)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Brad Crawford (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-1	Office phone Number	2816	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

Course Goals

1) Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

2) Students will learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

Course Objectives – English 1 students will be able to:

(1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.

(2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.

(3) Use appropriate vocabulary and grammar to express their ideas about the course topics.

(4) Follow the steps in the writing process.

(5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate chapter in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		20%	
discussion		20%	
homework		20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2: Third edition	Johannsen, Kristen & Tarver, Rebecca	National Geographic Learning	2015

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interview with Instructor	K	Brad Crawford			
2	Class introduction, Get to know your classmates, Chapter 1	K	Brad Crawford			
3	Writing: Paragraph Structure	K	Brad Crawford		Brainstorming Due	
4	Chapter 2	K	Brad Crawford		First Draft Due	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Writing: Paragraph Format *Writing Assignment #1	K	Brad Crawford			
6	Chapter 3	K	Brad Crawford		Final Draft Due	
7	Chapter 4	K	Brad Crawford			
8	Midterm Exam	K	Brad Crawford			
9	Chapter 6	K	Brad Crawford			
10	Chapter 7	K	Brad Crawford			
11	Chapter 10	K	Brad Crawford			
12	Chapter 11	K	Brad Crawford			
13	Chapter 12	K	Brad Crawford		Group Report	
14	Review and wrap-up	K	Brad Crawford			
15	Oral Test	K	Brad Crawford			
16	Final Exam	K	Brad Crawford			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)	Course code	X198
	Target students Division/major/grade	/1학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	수B(울261) 금B(울261)(울261)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	N/A		
	Related basic courses	N/A		
	Recommended concurrent courses	N/A		
	Related advanced courses	N/A		

Instructor	Name (title/division)		Nicholas McGhie (조교수/대학 다산학부대학)		
	Office Room Number	성호관 419호	Office phone Number	031-219-3256	e-mail
	Office hours	24-7 Online FB Messenger		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail oftheno@ajou.ac.kr

1. Introduction

English 1 for International Students is designed for beginning students whose native language is not English. This course aims to develop the speaking, listening, and reading skills of learners. Students are expected to learn and familiarize themselves with basic grammatical concepts and practice applying them so as to gain a good command of the written and spoken English language. In this course, participants should expect to develop the following:

- their understanding of English vocabulary and structures (i.e., grammar)
- their reading skills through various thematic contents
- their listening skills to elaborate details for further understanding
- their presentation skills

2. Course Objectives

3. Class types and activities

Students are encouraged to actively participate in class. After the lecture given by the professor, the students (in pairs) will practice what they have learned with their partners. They will also get an opportunity to present to the class what they have practiced. There will also be quizzes as well as a mid-term and final exam.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Basic English grammar Reading and listening abilities for college level
문서작성을 위한 워드프로세싱 능력 (과제)
아주Bb 사용능력

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam	1	25	
final exam	1	25	
quiz	2	20	
presentation			
discussion			
homework	4	15	
etc		5	
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2020	2020

10. Class system and Class schedule

Students are encouraged to actively participate in class. After the lecture given by the professor, the students will (in pairs) practice what they have learned with their partners. They will also get an opportunity to present to the class what they have practiced. There will also be quizzes as well as a mid-term and final exam. Students are expected to complete and submit 4 assignments given during the semester.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction		Nicholas McGhie			
2	Statements with Present of Be		Nicholas McGhie			
3	Yes/No Questions and Information Questions with Be		Nicholas McGhie			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Count Nouns; A/An; Have and Be		Nicholas McGhie			
5	Demonstratives and Possessives		Nicholas McGhie			
6	Descriptive Adjectives; Prepositions		Nicholas McGhie			
7	There is and There are; Simple Present		Nicholas McGhie			
8	Midterm Exam		Nicholas McGhie			
9	Simple Present Yes/ No Questions and Short Answers		Nicholas McGhie			
10	Simple Present Information Questions		Nicholas McGhie			
11	Conjunctions; And, But, Or; Because		Nicholas McGhie			
12	Simple Past Statements		Nicholas McGhie			
13	Simple Past Questions		Nicholas McGhie			
14	Simple Past of be		Nicholas McGhie			
15	Past Time Clauses with When, Before, and After		Nicholas McGhie			
16	Final exam		Nicholas McGhie			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X201
	Target students Division/major/grade	공통/공통			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월F(성201) 목F(성201)(성201)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmaded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Brad Crawford (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-1	Office phone Number	2816	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

Course Goals

1) Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

2) Students will learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

Course Objectives – English 1 students will be able to:

(1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.

(2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.

(3) Use appropriate vocabulary and grammar to express their ideas about the course topics.

(4) Follow the steps in the writing process.

(5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate chapter in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		20%	
discussion		20%	
homework		20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2: Third edition	Johannsen, Kristen & Tarver, Rebecca	National Geographic Learning	2015

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interview with Instructor	K	Brad Crawford			
2	Class introduction, Get to know your classmates, Chapter 1	K	Brad Crawford			
3	Writing: Paragraph Structure	K	Brad Crawford		Brainstorming Due	
4	Chapter 2	K	Brad Crawford		First Draft Due	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Writing: Paragraph Format *Writing Assignment #1	K	Brad Crawford			
6	Chapter 3	K	Brad Crawford		Final Draft Due	
7	Chapter 4	K	Brad Crawford			
8	Midterm Exam	K	Brad Crawford			
9	Chapter 6	K	Brad Crawford			
10	Chapter 7	K	Brad Crawford			
11	Chapter 10	K	Brad Crawford			
12	Chapter 11	K	Brad Crawford			
13	Chapter 12	K	Brad Crawford		Group Report	
14	Review and wrap-up	K	Brad Crawford			
15	Oral Test	K	Brad Crawford			
16	Final Exam	K	Brad Crawford			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X202
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(성 104) 목A(성 104)(성 104)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Kevin Hawthorne (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	2830	e-mail	
	Office hours	화3:00-4:30, 수3:00-4:30		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2020	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction	E	Kevin Hawthorne	face-to-face		
2	Unit 1 – Food from the Earth	E	Kevin Hawthorne	face-to-face		
3	Unit 2 – Express Yourself	E	Kevin Hawthorne	face-to-face		
4	Unit 3 – Cities	E	Kevin Hawthorne	face-to-face		
5	Unit 4 – The Body	E	Kevin Hawthorne	face-to-face		
6	Unit 5 – Challenges	E	Kevin Hawthorne	face-to-face		
7	Unit 6 – Transitions	E	Kevin Hawthorne	face-to-face		
8	MID-TERM EXAM	E	Kevin Hawthorne	face-to-face		
9	Unit 7 – Luxuries	E	Kevin Hawthorne	face-to-face		
10	Unit 8 – Nature	E	Kevin Hawthorne	face-to-face		
11	Unit 9 – Life in the Past	E	Kevin Hawthorne	face-to-face		
12	Unit 10 – Travel	E	Kevin Hawthorne	face-to-face		
13	Unit 11 – Careers	E	Kevin Hawthorne	face-to-face		
14	Unit 12 – Celebrations	E	Kevin Hawthorne	face-to-face		
15	Review	E	Kevin Hawthorne	face-to-face		
16	FINAL EXAM	E	Kevin Hawthorne	face-to-face		

11. Other items of notification

English 1 will be taught face-to-face in the classroom this semester (unless there is a policy change). Please be prepared to attend class, and to carefully follow all necessary Covid-19 safety measures.

(If there is a policy change, students will be notified)

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X203
	Target students Division/major/grade	1st Year/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(다506) 목A(다506)(다506)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Donald Hearn (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-2호	Office phone Number	2817	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade; 3 absences = 4 points off; 4 absences = 6 points off; 5 absences = 4 points off; 6 unexcused absences = F
midterm exam		15%	Midterm Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete a final oral test which will evaluate each student's speaking skills in an unscripted conversation or interview.
discussion		20%	Participation: Students are expected to speak English during class time and to complete all in-class tasks as well as homework assignments.
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organization of the paragraph, adequate development of the subject and proper formatting.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction and syllabus; Classroom English	E	Donald Hearn	대면		
2	Formal English	E	Donald Hearn	대면		
3	Unit 1 – Food from the Earth	E	Donald Hearn	대면		
4	Formal English, sentence-level correction & editing	E	Donald Hearn	대면		
5	Unit 2 – Express Yourself	E	Donald Hearn	대면		
6	Paragraph formatting, structure	E	Donald Hearn	대면		
7	Unit 2 – Express Yourself	E	Donald Hearn	대면		
8	MID-TERM EXAM	E	Donald Hearn	대면		
9	Unit 3 – Cities	E	Donald Hearn	대면		
10	Paragraph structure – Supporting sentences	E	Donald Hearn	대면		
11	Unit 3 – Cities	E	Donald Hearn	대면		
12	Unit 4 – The Body	E	Donald Hearn	대면		
13	Unit 4 – The Body	E	Donald Hearn	대면		
14	Unit 5 – Challenges	E	Donald Hearn	대면		
15	Review	E	Donald Hearn	대면		
16	FINAL EXAM	E	Donald Hearn	대면		

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X204
	Target students Division/major/grade	공통/공통			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(다B109) 목A(다B109)(다B109)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommmended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Brad Crawford (조교수/대학 다산학부대학)				
	Office Room Number	다산관 215-1	Office phone Number	2816	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

Course Goals

1) Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

2) Students will learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

Course Objectives – English 1 students will be able to:

(1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.

(2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.

(3) Use appropriate vocabulary and grammar to express their ideas about the course topics.

(4) Follow the steps in the writing process.

(5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input type="checkbox"/> discussion and debate
<input checked="" type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input checked="" type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate chapter in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	
midterm exam		15%	
final exam		15%	
quiz			
presentation		20%	
discussion		20%	
homework		20%	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2: Third edition	Johannsen, Kristen & Tarver, Rebecca	National Geographic Learning	2015

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interview with Instructor	K	Brad Crawford			
2	Class introduction, Get to know your classmates, Chapter 1	K	Brad Crawford			
3	Writing: Paragraph Structure	K	Brad Crawford		Brainstorming Due	
4	Chapter 2	K	Brad Crawford		First Draft Due	

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	Writing: Paragraph Format *Writing Assignment #1	K	Brad Crawford			
6	Chapter 3	K	Brad Crawford		Final Draft Due	
7	Chapter 4	K	Brad Crawford			
8	Midterm Exam	K	Brad Crawford			
9	Chapter 6	K	Brad Crawford			
10	Chapter 7	K	Brad Crawford			
11	Chapter 10	K	Brad Crawford			
12	Chapter 11	K	Brad Crawford			
13	Chapter 12	K	Brad Crawford		Group Report	
14	Review and wrap-up	K	Brad Crawford			
15	Oral Test	K	Brad Crawford			
16	Final Exam	K	Brad Crawford			

11. Other items of notification

Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X205
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(성233) 목A(성233)(성233)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Scott Scattergood (조교수/대학 다산학부대학)				
	Office Room Number	성호관420호	Office phone Number	1824	e-mail	
	Office hours	Mon, Wed, Thur: 1:30 - 2:00; Friday: 6-7 PM		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly.
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities.
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics.
- (4) Follow the steps in the writing process.
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence.
- (6) Write using complete sentences, avoiding fragments and run-on sentences.
- (7) Write using capital letters, periods and commas correctly.
- (8) Write with acceptable academic style and proper paragraph format.

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations. Students will also learn to produce an academic paragraph from a model which includes a topic sentence, supporting sentences and a concluding sentence, developing and supporting a main idea with specific reasons, details and examples.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

* Before each class please preview the appropriate unit in the textbook or the material in the Lectures Notes section of Blackboard.

수업시간 전에 반드시 책을 읽어 오시기 바랍니다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 absences = 2 points off; 3 absences = 4 points off; 4 absences = 6 points off...
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning	2020

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews / pronunciation	E	Scott Scattergood			
2	Conversations	E	Scott Scattergood			
3	Writing Part 1	E	Scott Scattergood			
4	Writing Part 2	E	Scott Scattergood			
5	Unit 1 – Food for Life	E	Scott Scattergood			
6	Unit 2 Express Yourself	E	Scott Scattergood			
7	Unit 3 Cities	E	Scott Scattergood			
8	MID-TERM EXAM	E	Scott Scattergood			
9	Speaking Test preparation	E	Scott Scattergood			
10	Midterm Speaking Test	E	Scott Scattergood			
11	Unit 4 The Body	E	Scott Scattergood			
12	Advice	E	Scott Scattergood			
13	Unit 8 – Conservation	E	Scott Scattergood			
14	Conditional Sentences	E	Scott Scattergood			
15	Review and Final Speaking Test	E	Scott Scattergood			
16	FINAL EXAM	E	Scott Scattergood			

11. Other items of notification

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Speaking and Writing in English

Course Name	Course type (credit/hours)	교필(3/3)			Course code	X206
	Target students Division/major/grade	Freshmen/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(성334) 목A(성334)(성334)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	Joseph Ball (조교수/대학 다산학부대학)				
	Office Room Number	성호관421호	Office phone Number	2846	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

English 1 is a required course for all undergraduate students. This course concentrates on English speaking and writing. Speaking lessons include pair work, small group tasks and class discussions. Writing lessons prepare students for academic paragraph-writing. The language of instruction is English and students are expected to communicate in English during class.

2. Course Objectives

- (1) Notice English pronunciation, intonation and stress patterns and practice speaking more clearly. (related to P07)
- (2) Speak more confidently and with less hesitation by repeatedly speaking English in pairs, groups and whole-class activities. (related to P07)
- (3) Use appropriate vocabulary and grammar to express their ideas about the course topics. (related to P07)
- (4) Follow the steps in the writing process. (related to P07)
- (5) Write using paragraph structure, which includes a topic sentence, supporting sentences, and a concluding sentence. (related to P07)
- (6) Write using complete sentences, avoiding fragments and run-on sentences. (related to P07)
- (7) Write using capital letters, periods and commas correctly. (related to P07)
- (8) Write with acceptable academic style and proper paragraph format. (related to P07)

3. Class types and activities

Students will gain confidence and improve their English speaking abilities by practicing expressions and dialogs and making their own conversations.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> e-class | <input checked="" type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input checked="" type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- * Before each class please preview the appropriate unit in the textbook.
수업시간 전에 반드시 책을 읽어 오시기 바랍니다.
- * Online homework should be completed before class.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Unexcused absences will reduce the attendance grade as follows: 2 unexcused absences = 2 points off the attendance grade 3 unexcused absences = 4
midterm exam		15%	Mid-Term Exam
final exam		15%	Final Exam
quiz			
presentation		20%	Students will complete several oral assignments during the course as well as a final oral test which will evaluate the student's speaking skills in an
discussion		20%	Students are expected to speak English during class time. Students are expected to complete all in-class tasks as well as homework assignments, includ
homework		20%	Students will complete one academic paragraph and additional writing assignments. Writing is evaluated on the correct use of formal English, the organ
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	World English 2 (third edition)	Johannsen, K. and Tarver-Chase, R.	National Geographic Learning/Cengage Learning, 2015	

10. Class system and Class shedule

<p>We will do the Writing Booklet first, then the textbook along with the Grammar Booklet for extra review.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Interviews	E	Joseph Ball	Online & Video		
2	Unit 1 – Food from the Earth	E	Joseph Ball	Online & Video		
3	Unit 2 – Express Yourself	E	Joseph Ball	Online & Video		
4	Unit 3 – Cities	E	Joseph Ball	Online & Video		
5	Unit 4 – The Body	E	Joseph Ball	Online & Video		
6	Unit 5 – Challenges	E	Joseph Ball	Online & Video		
7	Unit 6 – Transitions	E	Joseph Ball	Online & Video		
8	MID-TERM EXAM	E	Joseph Ball	Online & Video		
9	Unit 7 – Luxuries	E	Joseph Ball	Online & Video		
10	Unit 8 – Nature	E	Joseph Ball	Online & Video		
11	Unit 9 – Life in the Past	E	Joseph Ball	Online & Video		
12	Unit 10 – Travel	E	Joseph Ball	Online & Video		
13	Unit 11 – Careers	E	Joseph Ball	Online & Video		
14	Unit 12 – Celebrations	E	Joseph Ball	Online & Video		
15	Review	E	Joseph Ball	Online & Video		
16	FINAL EXAM	E	Joseph Ball	Online & Video		

11. Other items of notification

Statistical Physics 2

Course Name	Course type (credit/hours)	전선(3/3)			Course code	G032
	Target students Division/major/grade	물리학과/3학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	수B(원502) 금B(원502)(원502)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	Classical mechanics, quantum physics 1, electromagnetism				
	Related basic courses	Statistical physics 1				
	Recommanded concurrent courses					
	Related advanced courses	Solid-state physics, AI Physics				
Instructor	Name (title/division)	김성현 (조교수/자연과학대학 물리학과)				
	Office Room Number	원천관 421호	Office phone Number	2558	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This is a one-semester course on statistical mechanics. The course will start with the review of the general features of statistical mechanics such as ensembles, entropy, and phases. Then, we will talk about the basic tools of classical and quantum statistical mechanics in the context of thermodynamics of various physical systems such as ideal gas systems, mechanical systems, and chemical systems. The second part of the lecture will cover a few selective topics of advanced statistical mechanics, but kept at the introductory level as much as possible. The topics will include Bose-Einstein condensation, phase transitions in the Ising model, and the fluctuation-dissipation theorem.

2. Course Objectives

The notions and tools of statistical mechanics are widely used in many field of science and engineering, ranging from semiconductor physics to bioinformatics and communications. In this course, students will learn those basic concepts and methods of statistical mechanics and their applications to various problems such as phase transitions, bose-einstein condensation, chemical potentials, and several key issues in semiconductor physics.

3. Class types and activities

The course will consist of regular lectures based on the lecture notes (ppt) with the blackboard writing for some important contents. Some numerical simulation will be included. There will be about four homework assignments. Each homework will consist of 4-6 problems, which are designed to check and enhance students understanding on the basic concepts covered in lectures. Team-work for homework is recommended. But, of course, each student has to turn in his/her own homework.

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Students are expected to have basic knowledge on classical physics, quantum physics, and electromagnetism at the undergraduate level. But, I will cover those basic topics as much as I can to remind students.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		40	
final exam		40	
quiz			
presentation			
discussion			
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	An introduction to thermal physics	Daniel Schroeder	Pearson	1999
Sub	Thermodynamics and statistical mechanics	Walter Greiner	Springer	1995

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	What is statistical mechanics? Random walk problems	E	김성현	Lecture		
2	Review of thermodynamics: Energy and the second law	E	김성현	Lecture		
3	Review of thermodynamics: Interaction and implications	E	김성현	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Review of thermodynamics: Free energies	E	김성현	Lecture		
5	Boltzmann Statistics	E	김성현	Lecture		
6	Quantum statistical mechanics: general concepts	E	김성현	Lecture		
7	Quantum statistical mechanics: Bose and Fermi statistics	E	김성현	Lecture		
8	Mid-term exam	E	김성현	Exam	중간지필평가	
9	Fermi systems: metals and semiconductors	E	김성현	Lecture		
10	Bosonic systems: photons and phonons, Bose-Einstein condensation	E	김성현	Lecture		
11	Systems of interacting particles: the cluster expansion	E	김성현	Lecture		
12	Phase transition and critical phenomena: The Ising model	E	김성현	Lecture		
13	Phase transition and critical phenomena: The Ising model	E	김성현	Lecture		
14	Correlation, responses, and dissipation	E	김성현	Lecture		
15	Correlation, responses, and dissipation	E	김성현	Lecture		
16	Final exam	E	김성현	Exam	기말지필평가	

11. Other items of notification

Another great textbook (which is somewhat advanced, though) is available online at http://sethna.lassp.cornell.edu/statistical_mechanics_entropy_order_parameters_and_complexity

Stem Cell Engineering

Course Name	Course type (credit/hours)	전선(3/3)		Course code	D032	
	Target students Division/major/grade	응용화학생명공학과/3학년		Opening semester	2024 2ND SEMESTER	
	Class time and classroom	화C(혜107) 금C(혜107)(혜107)		English Grade	A(100%English)	
Reference to this course	Prerequisite courses	Biology I and II				
	Related basic courses	Cell Biology, Molecular Biology				
	Recommended concurrent courses	Developmental Biology				
	Related advanced courses					
Instructor	Name (title/division)	박현지 (조교수/대학원 분자과학기술학과)				
	Office Room Number	혜강관 423호	Office phone Number	031-219-2504	e-mail	
	Office hours	T 13:30-15:30		Homepage address	http://ctbi.ajou.ac.kr	
Teaching Assistant	Name (title/division)					
	Office Room Number	혜강관 415호	Office phone Number	2452	e-mail	dltmddnr1110@ajou.ac.kr

1. Introduction

This course offers an in-depth exploration of stem cell biology and tissue engineering. The course is divided into two main sections:

1. Stem Cell Biology

- Fundamental concepts of stem cell biology
- Regulatory mechanisms governing stem cell growth and differentiation
- Experimental techniques in stem cell research

2. Stem Cells and Tissue Engineering

- Integration of stem cell biology with tissue engineering principles
- Biomaterials and scaffolds for tissue engineering
- Applications of stem cells in regenerative medicine and tissue engineering

Students will gain a comprehensive understanding of stem cell types, their properties, and the principles of tissue engineering. The course will also cover ethical considerations and current challenges in the field. Students will develop critical thinking and research skills throughout both sections. They will learn to formulate relevant scientific questions, conduct literature reviews, and synthesize findings in these rapidly evolving fields.

2. Course Objectives

3. Class types and activities

To achieve the course objectives, we will employ a multi-faceted approach:

1. Lectures (60%):
 - Instructor-led presentations on key concepts, recent advancements, and case studies
 - Guest lectures from industry experts and researchers (if necessary)
2. Student Presentations (15%):
 - Individual or group presentations on assigned topics or research articles
 - Q&A sessions following each presentation to encourage critical discussion
3. Reports and Assignments (15%):
 - Literature reviews on specific stem cell types or tissue engineering applications
 - Research project report on a chosen topic in regenerative medicine
4. Exams (10%):
 - Mid-term exam (Week 8)
 - Final exam (Week 16)
5. Class Participation: active participation in class discussions and thoughtful questions will be rewarded with extra credit points (up to 5% of the total grade). This approach aims to encourage critical thinking and foster a dynamic learning environment.

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input checked="" type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input checked="" type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

<ol style="list-style-type: none"> 1. Knowledge in Biology, Cell Biology, and Molecular Biology 2. Scientific writing and presentation skills 3. Proficiency in English (reading, writing, and speaking)

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		7	
midterm exam	1	30	
final exam	1	30	Open book test
quiz			
presentation	1	30	
discussion			
homework			
etc		3	Extra Credit
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Stem Cells: Biology and Application	Mary Clarke, Jonathan Frampton	Routledge	2020
Main	Research articles and slides will be provided through AjourBb			

10. Class system and Class shedule

Week 1-3: Fundamentals of Stem Cell Biology
Week 4-6: Experimental Techniques in Stem Cell Research
Week 7-9: Principles of Tissue Engineering
Week 10-12: Applications in Regenerative Medicine
Week 13: Ethical Considerations and Regulatory Issues
Week 14-15: Student Project Presentations
Week 16: Course Review

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to Stem Cell Biology	E	박현지	Lecture		
2	Stem Cell Biology Fundamentals	E	박현지	Lecture		
3	Stem Cell Niches and Microenvironments	E	박현지	Lecture		
4	Molecular Regulation of Stem Cells	E	박현지	Lecture		
5	Stem Cell Culture Techniques	E	박현지	Lecture		
6	Genetic Engineering of Stem Cells	E	박현지	Lecture		
7	Epigenetic Regulation in Stem Cells	E	박현지	Lecture		
8	Midterm Exam	E	박현지	Exam		
9	Stem Cell Differentiation	E	박현지	Lecture		
10	Tissue Engineering/Biomaterials in Stem Cell Engineering	E	박현지	Lecture		
11	3D Culture Systems for Stem Cells	E	박현지	Lecture		
12	Stem Cells in Regenerative Medicine	E	박현지	Lecture		
13	Ethical and Regulatory Aspects of Stem Cell Engineering	E	박현지	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
14	Student Presentation I	E	박현지	Student Presentation		
15	Student Presentation II	E	박현지	Student Presentation		
16	Final Exam	E	박현지	Exam		

11. Other items of notification

Strategic Management(Capstone Design))

Course Name	Course type (credit/hours)	전필(3/3)			Course code	1025
	Target students Division/major/grade	경영학부/4학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(다B106) 목B(다B106)(다B106)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	김경호 (교수/경영대학 경영학과)				
	Office Room Number	다산관431호	Office phone Number	3672	e-mail	
	Office hours	Web/Fri: 4pm-5pm; Other times available by appointment	Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This course introduces students to issues associated how to formulate and implement firm strategy in the global environment. It draws on building a fundamental understanding of how and why some firms achieve and sustain superior performance. This course primarily aims at enabling students to understand and analyze the factors that affect organizations' long-run economic performance and to provide them with the tools to make recommendations to organization on how they can improve their long-term performance.

2. Course Objectives

This course provides students with specific tools that will enable them:

- to assess the structure of firms' external environments and understand how these affect expected long-run industry performance
- to evaluate firms competitive positioning and interaction, and assess firm-level resources and capabilities
- to develop appropriate and superior strategies at the business-unit and corporate levels
- to assess the dynamics of competition and understand how economic, social, political, and technological forces can determine the need for strategic re-positioning and affect long-term profitability
- to understand and manage the complex ethical and social issues facing organizations as they develop and implement their strategies

This class is designed to function like an MBA course and to prepare students (a) for potential MBA courses in the future and (b) for professional experience. Thus, this emphasizes class preparation and class discussion

3. Class types and activities

Lecture and discussion.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam		30	
final exam			
quiz			
presentation		30	Consulting Project
discussion		30	In class participation
homework		10	Individual Assignment
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Reading Articles will be distributed for each class			
Sub	The Management of Strategy-Concepts(over 10th Edition)	Ireland, Hoskisson, and Hitt	Cengage	

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Session 1: Introduction and Course Overview/Session 2: Conceptual and Practical Introduction Strategy	E	김경호			
2	Session 3: Understanding The Five Forces/ Session 4: Economics of Industry	E	김경호			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Session 5 : Industry Trends, Dynamics, and Evolution/ Session 6: Competitive Positioning Concepts	E	김경호			
4	Session 7 : Competitive Positioning In Action /Session 8: Competitive positioning in action – dual advantage	E	김경호			
5	Session 9 : Firm strategy and industry evolution (I) /Session 10: Firm Strategy and Industry Evolution (II)	E	김경호			
6	Session 11: Corporate strategy concepts, Session 12 : Corporate strategy in practice (I)	E	김경호			
7	Session 13: Target company introduction, Session 14: Midterm review	E	김경호			
8	Session 15 and 16 : Midterm Exam (Good Luck!!!)- No Class-	E	김경호			
9	Session 17 and 18: Time for Team Project (Meeting with Faculty is available on demand)	E	김경호			
10	Session 19: Strategy Implementation – Governance /Session 20: Strategy Implementation In Action ? Social Responsibility	E	김경호			
11	Session 21: Concepts In Technology Strategy /Session 22: Understanding Disruptive Change (I)	E	김경호			
12	Session 23: Understanding Disruptive Change (II)/Session 24: Firm Strategy – Cooperative Strategy	E	김경호			
13	Session 25: Global Strategy /Session 26: Organizational Structure and Control Mechanism	E	김경호			
14	Session 27 and 28: Time For Team Projects	E	김경호			
15	Session 29 and 30: Team Project Final Presentation	E	김경호			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
16	Session 31 and 32: Final Exam Week	E	김경호			

11. Other items of notification

The principles of Sociology 2

Course Name	Course type (credit/hours)	전필(3/3)			Course code	K073
	Target students Division/major/grade	사회학과/1학년			Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(울257) 목B(울257)(울257)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)	호정화 (교수/사회과학대학 사회학과)				
	Office Room Number	울곡관 420호	Office phone Number	2778	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Sociology is a scientific discipline of society and people within it. Its main subjects are the process and outcome of complex interplay between society and people. The scope of sociology is extremely wide, ranging from day-to-day interaction between two friends to international relations over environmental issues. Sociology has unique perspectives to understand society and individual lives: sociological imagination which aims to understand individual and private issues in the context of broader social and public structure. This course aims to introduce sociology by exposing students to essential concepts of sociology, various subfields, and classical and contemporary social issues. Students who have taken this course successfully will gain sociological imagination and will be able to apply this perspective to various public and private issues and to understand private and public lives in different lights.

2. Course Objectives

Students who have taken this course successfully will gain sociological imagination and will be able to apply this perspective to various public and private issues and to understand private and public lives in different lights.

3. Class types and activities

Combination of lectures by lecturer and seminar-style discussions by students

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Sociological curiosity, ability and motivation to ask sociological questions and to answer them.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance	14	15	
midterm exam	1	30	
final exam	1	30	
quiz			
presentation	1	15	
discussion			
homework	1	10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Sociology	A. Giddens, P. Sutton	Polity	2021
Main	Essential concepts in sociology	A. Giddens, P. Sutton	Polity	2021
Sub	현대사회학	A. Giddens, P. Sutton	을유문화사	2018
Sub	사회학의 핵심 개념들	A. Giddens, P. Sutton	을유문화사	2018

10. Class system and Class shedule

사회조사의 전 과정을 이론적으로 학습하고 실습한다.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction	E	호정화			
2	Sociological imagination, again	E	호정화			
3	Sociological research methods	E	호정화			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Social interactions and everyday life-1	E	호정화			
5	Social interactions and everyday life-2	E	호정화			
6	The life course-1	E	호정화			
7	The life course-2	E	호정화			
8	Midterm exam	E	호정화			
9	Family and intimate relationships-1	E	호정화			
10	Family and intimate relationships-2	E	호정화			
11	Health, illness and disability-1	E	호정화			
12	Health, illness and disability-2	E	호정화			
13	Crime and deviance-1	E	호정화			
14	Crime and deviance-2	E	호정화			
15	Review	E	호정화			
16	Final exam	E	호정화			

11. Other items of notification

Theories & Experiments in Social Psychology

Course Name	Course type (credit/hours)	전필 (3/3)		Course code	K061
	Target students Division/major/grade	심리학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화F(울256) 목E(울256)(울256)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	심리학개론			
	Related basic courses	심리통계1, 심리통계2			
	Recommended concurrent courses				
	Related advanced courses	집단심리학, 동기와 정서, 조직심리학 및 실습, 건강심리학, 여성심리학			
Instructor	Name (title/division)		박현준		
	Office Room Number	울곡관 518호	Office phone Number	2768	e-mail
	Office hours	Wednesday 9AM - 11AM, or by appointment	Homepage address	https://www.hyunjoonpark.net	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

Social psychology is a scientific study that investigates how our thoughts, feelings, and behaviors are influenced by how we interact with ourselves, others, and the environment! Social Psychology utilizes scientific methods to test such ideas. In this course, we will learn domains related to social perception (how do we perceive ourselves and others), social influence (how do we influences others), and social relations (how do we interact with other individuals and groups). Specifically, we will learn topics such as perception of self, attitude, motivation, emotions, conformity, interpersonal (romantic) relationships, intergroup relations, stereotypes, prejudice, discrimination, and culture. This course will be a foundation for taking more advanced courses in psychology such as Group Dynamics, Motivation & Emotion, Organizational Psychology & Practicums, Consumer Psychology, and Health Psychology. Through this course, you will gain scientific and social-psychological perspectives to better understand real-life phenomena.

2. Course Objectives

3. Class types and activities

This class will consist of lectures, discussions, group projects, and presentations. The course materials will be lectured by the instructor. During each class, there will be several discussion sessions. Students will be asked to break into groups and discuss the previous readings and materials learned in the class. Once the discussion is completed, students will come together and share what they discussed with the class. For this class, active participation during the discussion is important. Also, there will be a semester-long group project where group members have to write a research proposal (i.e., indicating how they will test their hypothesis/research question). In this research proposal, the groups have to include introduction, methods, (expected) results and reference section (10-15 pages). Thus, during the class, there will be opportunities for groups to discuss their project and seek the instructor's feedback. At the end of the semester, the groups will be asked to present their research proposal (10 minutes). Also, in this class, students will have a weekly assignment (1 page) where they have to write about upcoming readings for the class. There will be both midterm and final exams. Overall, I expect students to 1) attend classes, 2) actively participate in in-class discussions, 3) actively participate in group projects, and 4) read and write about assigned readings.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|--|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

- Ability to read journal articles and textbooks in English
- Ability to understand and interpret statistical results in journal articles
- Ability to write thoughts/opinions in English

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	Attendance: Class attendance will be expected from you throughout the semester.
midterm exam	1	15	Midterm: To evaluate your understanding of course content, there will be one midterm.
final exam	1	15	Final: To evaluate your understanding of course content, there will be one final.
quiz			
presentation	1	10	Proposal Presentation: At the end of the semester, your group will give a 10-minute presentation on your research proposal.
discussion			
homework	9	20	Weekly Reflections: In most weeks, I ask you to submit a weekly/biweekly reflection for the UPCOMING lectures readings.
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Social Psychology (https://www.pearson.com/en-us/subject-catalog/p/social-psychology/P200000006448/9780137869602) – using older version is OK	Elliot Aronson, Timothy D. Wilson, Samuel R. Sommers, Elizabeth Page-Gould and Neil Lewis Jr. (11th Edition)	Pearson	2023
Main	Reading List (this list will be provided by the instructor)			

10. Class system and Class shedule

For the courses to be helpful for students, students should be able to understand the real-life implications of the materials and connect them to their interests and own research. To achieve this goal, whenever possible, the class will connect the materials to real-life examples and implications. For example, at the start of the class, the theoretical understanding of topics will be introduced. In the later parts of the class, the concepts that were learned in the class will be connected to real-life phenomena and students will get chances to discuss them. Relatedly, students will be asked to write about weekly reflection that connects what they learned to real-life phenomena. Further, students will engage in a group project where they have to write a research proposal. This project will further grant students real-life application opportunities as they will learn how to write research papers and conduct research in social psychology.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to the Course & Social psychology	E	박현준	This class will provide information on the course and social psychology	No assignment	Read Ch 1. & Other readings to be decided (TBD)
2	Research in Social psychology	E	박현준	This class will introduce research methodology utilized in social psychology	Weekly reflection 1 due	Read Ch 2. & Other readings TBD
3	Social Cognition	E	박현준	This class will focus on social cognition: how we think about the social world	Group formation for group project & No assignment	Read Ch 3. & Other readings TBD
4	Social Perception	E	박현준	This class will focus on social perception: how we come to understand other people	Weekly reflection 2 due	Read Ch 4. & Other readings TBD
5	Self	E	박현준	This class will focus on Self: Understanding ourselves in a social context	Weekly reflection 3 due	Read Ch 5. & Other readings TBD

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
6	Cognitive Dissonance	E	박현준	This class will focus on cognitive dissonance and the need to protect self-esteem	Weekly reflection 4 due	Read Ch 6. & Other readings TBD
7	Attitudes/Emotion/Motivation	E	박현준	This class will focus on attitudes, emotion and motivation and how they impact our behaviors	Group project research question due	Read Ch 7. & Other readings TBD
8	Exam 1	E	박현준	This is the exam week	Midterm exam	
9	Conformity	E	박현준	This class will focus on conformity and obedience	Weekly reflection 5 due	Read Ch 8. & Other readings TBD
10	Culture	E	박현준	This class will focus on culture and how it influences our thoughts, feelings and behaviors	Weekly reflection 6 due	Reading will be provided
11	Intergroup Relations	E	박현준	This class will focus on intergroup relations and group processes	Weekly reflection 7 due	Read Ch 9. & Other readings TBD
12	Stereotype/Prejudice/Discrimination	E	박현준	This class will focus on stereotype/prejudice/discrimination	Group project first draft due & Weekly reflection 8 due	Read Ch 13. & Other readings TBD
13	Prosocial Behavior & Aggression	E	박현준	This class will focus on prosocial and aggressive behaviors	Weekly reflection 9 due	Read Ch 11 -12.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
14	Close Relationships & Exam 2	E	박현준	This class will focus on close relationships and Exam 2 will take place	Final exam	Read Ch 10.
15	Group Presentation	E	박현준	Groups will present their research proposal (10 minutes per group)	Research proposal presentation	
16	Group Presentation	E	박현준	Groups will present their research proposal (10 minutes per group)	Research proposal presentation & Research proposal due	

11. Other items of notification

***Attendance/Participation (10%): Class attendance will be expected from you throughout the semester. Things can happen in your life! You can miss two classes without any excuses. However, if you miss any class without excuse after missing two classes, 10% of the total attendance points will be taken off for each day of missingness. If your family or personal emergency or illness causes you to miss class, please let me know in advance!

***Two Exams (30%; 15% each exam): To evaluate your understanding of course content, there will be two noncumulative exams. Each exam will include short answers, multiple choice, and essay questions.

***Weekly Reflections (20%): In most weeks, I ask you to submit a weekly reflection for the UPCOMING lecture's readings. This reflection should be full page (double-spaced). I ask you to submit your papers before the class so you have a chance to think about the materials you will learn in the course. You can choose to submit your response for either the Tuesday (due on Mon at noon) or Thursday class (due on Wed at noon). You can skip two assignments. If you choose to submit all assignments, I will drop the two lowest scores. There are a few different options that you can use in your weekly reflections : 1. Discuss how the findings/theories in weekly reading materials may apply to particular everyday social-related behaviors or real-world phenomena, 2. Integrate the weeks reading material to previous readings or discussions we had in the class (e.g., do the readings support or contradict previous readings/discussions?). 3. Suggesting alternative explanations for some of the empirical findings in the readings 4. Discuss how you can apply the research method you learned in your reading to test real-world research questions

***Research Proposal (30%): You are asked to form a group of 5-6 members. The group members will work together to write up a research proposal about topics we learned in class. In this proposal, you will be asked to design a study to test your hypotheses. For this class, you will not be collecting data but I am more than happy to support the actual execution of the study in the future. This proposal is similar to the peer-reviewed empirical research article and needs to have the following sections: (1) an Introduction, (2) a Methods section, (3) a brief Data Analysis Plan including a chart/figure of expected results, and (4) an APA-style References section. Don't worry! This assignment will be broken down into multiple sections! 1. Hypothesis submission (5%): Earlier in the semester you will be asked to submit your research question/hypothesis. Your research question/hypothesis has to be clear and should be written in one sentence. Along with the hypothesis, please submit one one-paragraph explanation about what you want to study. It also can be from topics that we have not yet learned in the class (but we will later on in the class). 2. First draft (12.5%): In this first draft, you will be asked to submit the introduction and methodology. This introduction should incorporate a literature review. For the literature review, you need to write about relevant literature about your research question. You need to include what is already known and what needs to be researched. Then, in the methodology section, you need to incorporate how you will test your hypotheses (i.e., study design) and the questions/ideas you will use in your study. 3. Final draft (12.5%): This assignment

question/hypothesis. Your research question/hypothesis has to be clear and should be written in one sentence. Along with the hypothesis, please submit one one-paragraph explanation about what you want to study. It also can be from topics that we have not yet learned in the class (but we will later on in the class). 2. First draft (12.5%): In this first draft, you will be asked to submit the introduction and methodology. This introduction should incorporate a literature review. For the literature review, you need to write about relevant literature about your research question. You need to include what is already known and what needs to be researched. Then, in the methodology section, you need to incorporate how you will test your hypotheses (i.e., study design) and the questions/ideas you will use in your study. 3. Final draft (12.5%): This assignment

Traffic Study and Data Analytics

Course Name	Course type (credit/hours)	전필(3/3)		Course code	E051
	Target students Division/major/grade	교통시스템공학과/2학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월B(팔211) 목B(팔211)(팔211)		English Grade	A(100%English)
Reference to this course	Prerequisite courses	없음			
	Related basic courses	없음			
	Recommanded concurrent courses	교통조사실습			
	Related advanced courses	교통제어			
Instructor	Name (title/division)	소재현 (조교수/공과대학 교통시스템공학과)			
	Office Room Number		Office phone Number	2535	e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number	산학협력원 215-1	Office phone Number		e-mail ssmm0719@ajou.ac.kr

1. Introduction

Observation of real traffic conditions and drivers behaviors has always been the basis for traffic engineering studies. Therefore, good traffic engineers should be familiar with diverse methods to collect any traffic data necessary for in-depth traffic engineering studies. To this end, this class, Traffic Study, is initiated to deliver various skills and methodologies for field traffic data collection in a safe and efficient way.

2. Course Objectives

This course is designed to deliver students with followings;

- 1) Basic theories related with traffic studies,
- 2) Safety issues during traffic studies,
- 3) Skills and techniques for traffic studies,
- 4) Interpretation skill on the collected data, and
- 5) Basic statistical skill to analyze the data.

3. Class types and activities

Course Structure:

The course works will be conducted based on the following four steps:

Step1: Explanation on basic concepts, usages, and examples,

Step2: Explanation on the methodologies for diverse traffic studies,

Step3: Practices using examples and homework, and

Step4: Questions and answers, feedback to the subject step, if necessary.

4. Teaching Method

lecture

discussion and debate

team project(presentation and case studies)

experiments(role-playing,etc)

designing and production

on-site learning(on-site training)

others

5. Support Systems in Use

e-class

automatic recording system

web-based assignment

cyber lecture

blended learning(combination of online and offline teaching)

class behavior analyzing system

others

6. Teaching Tools

PBL(Problem Based Learning)

CBL(Case Based Learning)

TBL(Team Based Learning)

others

7. Knowledge and ability required for taking this course

All students are required to understand basic concepts and terminologies related with traffic engineering and traffic flow analysis in advance. Students will use appropriate software like Excel to conduct actual traffic studies and analyses.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5	Attendance
midterm exam	1	25	Mid-term examination
final exam	1	35	final examination
quiz			
presentation	1	25	Project and presentation
discussion			
homework		10	homeworks
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Manual of Transportation Engineering Studies (2nd Edition)	Institute of Transportation Engineers	ITE	2010
Main	스마트교통시스템개론	한국ITS학회(소재현 외)	교문사	2023

10. Class system and Class shedule

Lectures are given twice weekly. Lectures include a mixture of presentation of material using PowerPoint and interactive exercises. Participation is encouraged, but not required. Attendance will be taken at each lecture. It is noted that absences for the first lectures do not count in grading. There are no lectures on exam days.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction & Safety during traffic studies	K	소재현	Lecture		
2	Volume Studies & Spot Speed Studies	K	소재현	Lecture		
3	Intersection and Driveway Studies: Introduction & Delay	K	소재현	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Intersection and Driveway Studies: Queue length & Saturation Flow and Lost Time	K	소재현	Lecture		
5	Intersection and Driveway Studies: Gap and Gap acceptance & Sight Distance	K	소재현	Lecture		
6	Compliance with Traffic Control Devices & AV warnings	K	소재현	Lecture		
7	Travel-Time and Delay Studies	K	소재현	Lecture		
8	Midterm examination	K	소재현	-		
9	Public Transportation Studies & Goods Movement Studies	K	소재현	Lecture		
10	Parking Studies	K	소재현	Lecture		
11	Traffic Collision Studies & Surrogate Safety Measure	K	소재현	Lecture		
12	Multiverse Simulation & Co-Simulation	K	소재현	Lecture		
13	Mobile Comm. Data & Processing	K	소재현	Lecture		
14	Mobility Big Data & Processing	K	소재현	Lecture		
15	Other Data & Handling Technique	K	소재현	Lecture		
16	Final examination	K	소재현	-		

11. Other items of notification

Homework is an essential tool for learning class materials and exercising methodologies for traffic studies. Except when stated otherwise, homework will be due at the beginning of the class time as noted. Late homework will not be accepted. In addition, homework should be done without any assistance from other students. No cheating on homework is allowed. Any suspicious homework will not be accepted. Each homework must have a cover sheet saying the name and ID of the student. It is noted that the homework without a cover sheet will not be accepted.

Understanding Korean Society

Course Name	Course type (credit/hours)	교필(3/3)		Course code	X521
	Target students Division/major/grade	/1학년		Opening semester	2024 2ND SEMESTER
	Class time and classroom	화F(다506) 목E(다506)(다506)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	이효정 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

This course provides an overview of contemporary Korean society and culture, and seeks to understand how the core societal values and popular culture have been transformed in interaction with key historical events. As we explore Korean society with an emphasis on four areas: politics, economy, people, and popular culture, we address key themes and issues that Korean society has been facing.

During the course, you will:

Construct connections and relationships between socio-economic structures and individuals' lifestyles.
Broaden social insights and foster critical thinking in society and culture.

Understand the ways in which popular culture reflects society. See Korean society from the perspectives of the local and the global.

2. Course Objectives

3. Class types and activities

This course is mainly lecture-based learning to deliver comprehensive knowledge about Korean society. Throughout the course, the instructor will outline the historical events with multi-media resources, and students analyze the social incidents through individual exercises and group discussions. For three weeks, students will lead the class by presentations of their case study of K-culture in global venues.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|--|---|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

No require prior knowledge or skills

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		15	Attendance and Participation
midterm exam		25	
final exam		25	
quiz			
presentation		15	Presentation
discussion			
homework		20	2 response papers
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	The Routledge Handbook of Korean Culture and Society	Youna Kim	Routledge	2016
Sub	Concise History of Modern Korea: From the Late Nineteenth Century to the Present	Michael J. Seth	Lanham, Md: Rowman & Littlefield	2016
Sub	Routledge Handbook of Contemporary South Korea	Lim, Sojin, and Niki J. P. Alsford	Routledge	2021

10. Class system and Class shedule

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< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course Introduction & Brief Introduction to Contemporary History- key historical junctures	E	이효정	Lecture/Discussion		
2	History:Contemporary History and Collective Consciousness	E	이효정	Lecture		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
3	Politics: From military dictatorship to liberal democracy	E	이효정	Lecture		
4	Screening and discussion: 1987 When the Day Comes (Jang Joon-hwan, 2017)	E	이효정	Lecture/Discussion		
5	Politics: Korea as a divided nation	E	이효정	Lecture		
6	Economy: Economic Development from postwar poverty to advanced knowledge economy	E	이효정	Lecture		
7	Economy: Dark side of the Rise of Korea Inc. (Chaebol, flexible labor markets)	E	이효정	Lecture		
8	Midterm exam	E	이효정	Exam	Closed book exam: Identification and Essay questions	
9	Korean family and Gender roles in transition	E	이효정	Lecture		
10	People: Education Fever People: Confucianism and the	E	이효정	Lecture		
11	Culture: Brief History of Pop culture	E	이효정	Lecture/Discussion		
12	Culture: The role and influence of Pop culture	E	이효정	Lecture/Discussion		
13	K-culture in Global venues: Students' presentation	E	이효정	Student Presentations		
14	K-culture in Global venues: Students' presentation	E	이효정	Student Presentations		
15	K-Culture: Cultural industry and creativity	E	이효정	Lecture/Discussion		
16	Final Exam	E	이효정	Exam	Closed book exam: Identification and Essay questions	

11. Other items of notification

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Understanding Media Art

Course Name	Course type (credit/hours)	교선(3/3)		Course code	X020
	Target students Division/major/grade	/		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월C(성 135) 수C(성 135)(성 135)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommmaded concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	송기원 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours	월B, 수B		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail songkiwon@ajou.ac.kr

1. Introduction

This class is an introduction to media art with practical examples. Overall scanning of the rapid growth era of media art from photography to computer based art including video art, computer art, net art and NFT will be introduced. Major aesthetic theories related to media art, such as Aura, Simulacra, and Sublime will also be explored. Students will practice and reconsider their ideas and thoughts on media art and ultimately create media art work with an appreciation of art.

2. Course Objectives

3. Class types and activities

Consists of lecture and discussion, media practice, making an art work, exhibition and critique, etc.

1. Lecture and discussion: Introducing aesthetic concepts and pieces, methods of contemporary art, and discussing discourse on media art
2. Media practice: Photography, video recording, editing practice, and guidance on various media and installation
3. Creation art works : Making an art work around topics and media of interest
4. Exhibition and critique

4. Teaching Method

- | | |
|--|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input checked="" type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input checked="" type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

Curiosity about art
Open mind toward new areas
Attitude of respect for other fields

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		30	1 point deduction per absence and 0.25 points deduction per lateness
midterm exam		20	Narrative evaluation of the main concepts and understanding of media art
final exam		20	Making an art work
quiz			
presentation			
discussion			
homework		20	Understanding and application of various media
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	The Work of Art in the Age of Mechanical Reproduction	Walter Benjamin	Penguin Great Ideas	2008
	Simulacra and Simulation	Jean Baudrillard	Semiotext(e)	1983
	New Media Art	Michael Rush	Thames&Hudson world of art	2004

10. Class system and Class shedule

The class is largely composed of two parts.

1. The first half consists of a theoretical lecture and an appreciation of related works. Present preliminary questions and conduct a closing discussion so that the subject and discussion content of the theory class can be linked to the production of the second half of the work.

2. The second half consists of team creation, exhibition, and critique after media practice.

1) Learn photography, video production and editing techniques for the creation of works.

2) The theme of the work is selected then the work of each student is produced, finally exhibitions and works are conducted.

* language : K-korean, E-English

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Course introduction and orientation 1) An Overview of Media Art and Walter Benjamins <The Work of Art in the Age of Mechanical Reproduction> 2) Self-introduction (including impressive exhibitions, photographs, movies, and videos)		송기원			
2	1. Question: What do painting and photography have in common and what are the differences? 2. Lecture: Artwork in the age of technological cloning: the relationship between painting and photography, events that lead to the collapse of aura, photography that takes away the soul, and attitudes toward accepting newness 3. Discussion: painting and photography with aura at the center.		송기원			
3	1. Question: How are experiences in art galleries and cinemas different? 2. Lecture: Changing Attitudes of Art in the Age of Technology Replication: Painting and Film, Architecture and Media Facades 3. Discussion: the types and functions of sensory experiences that modern people seek.		송기원			
4	1. Question: What does the “original” mean? 2. Lecture: Cultural phenomena in the Simulacra era, definition of the Simulacra terminology, the transmission of original and copy, pop art and hyper reality 3. Discussion: Why did a clone have an aura and become possible to be the original?		송기원			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	1. Question: Lets talk about the media art experience 2. Lecture: The aura of simulacra: video art, computer art, media art, and media fa?ade 3. Discussion: Is the aura of media art only possible in art galleries?		송기원			
6	1. Question: What are your experiences of sublime moments in life? 2. Lecture: Art Changing from Beauty to Sublime 3. Discussion: Interpret the work presented so far from the perspective of beauty and sublime.		송기원			
7	1. Question: Lets look at the article presented (an article on the NFT controversy) and talk about it 2. Lectures: The aura and sublime of media art: Bill Viola, Julius Pope, to NTF 3. Discussion: What Would You Think About NFT If Benjamin Is Alive?		송기원			
8	Mid-term exam		송기원			
9	1. Visit Designated Exhibition Hall 2. Submission of critique in the form given		송기원			
10	1. Question: Lets Look Ahead at the Future of Media Art 2. Lecture: Reflections on new media, technological societies such as virtual reality, augmented reality, interactive art, robot life, kinetics and robotics, video games, etc. 3. Discussion: How can I and society be defined in a media art environment?		송기원			
11	1. Media Practice 11) Practice taking and editing cell phone photos 2) Video shooting and editing practice, etc.		송기원			
12	1. Media Practice 2: New Media Practice, etc		송기원			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
13	1. Media Practice 31) Installation Method and Effectiveness Practice: Effectiveness by Place of Installation, Effects of media, 2) Mixing effect practice with other materials, etc.		송기원			
14	1. Team production and creative guidance for works 2. After forming a team, focus on the topics and media of interest, then start producing works by team		송기원			
15	Presentation and Critic		송기원			
16	Presentation and Critic		송기원			

11. Other items of notification

The type of media and the order and content of lectures can be adjusted.

Western Music History

Course Name	Course type (credit/hours)	교필(3/3)		Course code	X503
	Target students Division/major/grade	/		Opening semester	2024 2ND SEMESTER
	Class time and classroom	월D(성 135) 목D(성 135)(성 135)		English Grade	A(100%English)
Reference to this course	Prerequisite courses				
	Related basic courses				
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	채수아 (강사/대학 다산학부대학)			
	Office Room Number		Office phone Number		e-mail
	Office hours	월 12~1pm		Homepage address	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail chae1990@ajou.ac.kr

1. Introduction

This course is designed to develop a knowledge of the principal events in the course of development of classical music in western history. By providing familiarity with classical music, students will develop interest in classical music and appreciate various styles in each historical period. This class is related to the aesthetic, convergence, and cultural openness of our university.

2. Course Objectives

Student will gain knowledge and understanding of western classical music of various styles, historical periods, and cultural sources.

Students will have easy and close access to Western classical music.

Students will realize the timeless charm of classical music that makes everyones life rich and full.

Students will have the ability to choose valuable classical music to listen to.

3. Class types and activities

1. live. face to face class
2. lecture, listening/watching various materials
3. discussion, Q & A

4. Teaching Method

- | | |
|--|--|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input checked="" type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> e-class | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input type="checkbox"/> blended learning(combination of online and offline teaching) | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning) | <input type="checkbox"/> others |

7. Knowledge and ability required for taking this course

English comprehension

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam		40	
final exam		40	
quiz			
presentation			
discussion			
homework		10	
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Ref.	A History of Western Music	Burkholder, Grout, Palisca	WW Norton & Co.	2019
Ref.	고전음악의 이해	허영한, 이석원	심설당	1994
Ref.	음악에서 무엇을 들어낼 것인가	에런 코플랜드	포노	2016
Ref.	What to Listen for in Music	Aaron Copland	Berkley	2009

10. Class system and Class shedule

<p>Starting from the ancient Greek music, lectures will be conducted by chronological order and various musical styles;</p> <p>Middle-age Renaissance era</p> <p>Baroque period Classical period Romantic period Impressionism 20th & 21st century music</p> <p>Also by various musical genres;</p> <p>Vocal music Instrumental music: orchestral music; chamber music; opera; solo repertoires, etc.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	An overview of western classical music history, Ancient Greek music, Middle Age	E	채수아	Lecture & listening		
2	Renaissance era, Early Baroque music	E	채수아	Lecture & listening		
3	Baroque period: Bach, Handel, Vivaldi, Scarlatti, etc.	E	채수아	Lecture & listening		
4	Baroque period, Rococo style, Galant style	E	채수아	Lecture & listening		
5	Classical period: Haydn, Mozart	E	채수아	Lecture & listening		
6	Mozart, Beethoven	E	채수아	Lecture & listening		
7	Beethoven	E	채수아	Lecture & listening		
8	Mid-term	E	채수아		written exam	
9	Romantic period: Schubert, Mendelssohn, etc.	E	채수아	Lecture & listening		
10	Chopin, Schumann, etc.	E	채수아	Lecture & listening		
11	Liszt, Brahms, etc.	E	채수아	Lecture & listening		
12	Eastern European music: Dvorak, Smetana, the Mighty Handful, etc.	E	채수아	Lecture & listening		
13	Impressionists: Debussy, Ravel	E	채수아	Lecture & listening		
14	20th century: the 2nd Viennese school, Neo-classicism, Avant-garde	E	채수아	Lecture & listening		
15	The synthesis of Eastern and Western music	E	채수아	Lecture & listening		
16	Finals	E	채수아		written exam	

11. Other items of notification

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X-ray Diffraction in Materials Science

Course Name	Course type (credit/hours)	전선(3/3)	Course code	0096
	Target students Division/major/grade	첨단신소재공학과/2학년	Opening semester	2024 2ND SEMESTER
	Class time and classroom	화B(팔207) 목A(팔207)(팔207)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	재료과학1, 재료과학2		
	Related basic courses	재료과학1,2, 결정구조학		
	Recommanded concurrent courses			
	Related advanced courses			

Instructor	Name (title/division)	박진성			
	Office Room Number	다차원 에너지재료 연구실	Office phone Number	2467	e-mail
	Office hours		Homepage address	https://ownerp0424.wixsite.com/my-site	
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail

1. Introduction

2. Course Objectives

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input checked="" type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input checked="" type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

재료과학의 기초와 결정구조에 대한 기본적 이해를 전제로 강의를 진행한다.
고체물리학과파동 및 미적분학의기초지식을필요로한다.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam	1	45	
final exam	1	45	
quiz			
presentation			
discussion			
homework			
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Elements of X-ray Diffraction (3rd edition)	B.D.Cullity		
Sub	PDF file	담당교수		

10. Class system and Class shedule

<p>이론 강의 후 실제 X-선 회절이 사용되는 재료과학의 다양한 예를 출판된 논문을 통해 분석하고 이해하며, 최종적으로 X-선 회절장비를 직접 방문하여, 시료를 측정하는 과정을 배움으로써 학문의 실용성에 중점을 두고자 함.</p>

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	재료분석기기와 Nobel Prize(X-ray의 발견 포함)	E	박진성			
2	X-선의기초및 특성	E	박진성			
3	고체 재료의 결정구조	E	박진성			
4	X-선회절분석 장치	E	박진성			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
5	X-선회절 이론1	E	박진성			
6	X-선회절 이론2	E	박진성			
7	다결정에 의한 X-선회절1	E	박진성			
8	중간고사	E	박진성			
9	다결정에 의한 X-선회절2	E	박진성			
10	X-선회절의 응용-결정방위와 품질	E	박진성			
11	X-선회절의 응용-격자상수의 측정	E	박진성			
12	X-선회절의 응용-화학분석	E	박진성			
13	X-선회절의 응용-나노 재료 및 고분자 재료 분석	E	박진성			
14	분광학으로의 X-선 사용과 응용	E	박진성			
15	X-선 회절 기계의 사용과 측정 (현장 학습)	E	박진성			
16	기말고사	E	박진성			

11. Other items of notification