

(Syllabus)

[1] (Basic Information)					
<u>(Course Information)</u>					
/	2021 / 1		(Campus)		(Seoul Campus)
(Year/Semester)					
(Course No.)	11934	(Class No.)	03	(Credit)	3
(Course Title)	(NUMERICAL ANALYSIS)	/	(Time/Room)	310 726 < > / 727 < > 1,2 / 2(310 726 < > / 727 < > WED1,2 / MON2)	
(Course Classification)	(Major)	(Lecture Type)		(Lone-teaching course)	
(Course Type)	(Theoretical course)	(Medium of Instruction)			
(Accreditation)		(Accreditation of Engineering Education)		BSM(BSM)	
(College)	(College of Software)	() (Department)		(School of Computer Science and Engineering)	
e-class (Usage of e-class)	No				
<u>(Instructor Information)</u>					
(Name)	(Park Kyoung Ju)	(Department)		(School of Computer Science and Engineering)	
(Office Phone No.)	02-820-5823	(Contact No.)		02-820-5823	
E-mail (E-mail)	kjpark@cau.ac.kr	(Department Phone No.)		02-820-5301	
가 (Office Hour)	5,6	(Office Location)		305 604	
(Course Web-site)	http://graphics.cau.ac.kr				

[2] / (Learning Objectives/Outcomes)		
<u>(Course Description)</u>		
<p>- (, ,)</p> <p>- 2D/3D (iterative methods for differential equations)</p> <p>- Interpolation (lagrange polynomial, bezier)</p> <p>- Approximation (least square fitting, regression)</p> <p>- Optimization (conjugate gradient method)</p>		
<u>(Prerequisites and Co-requisites)</u>		
<u>(Learning Objectives)</u>		
<p>< ></p> <p>- , , , Geometry</p> <p>- , , Affine Transformations</p> <p>-</p> <p>-</p> <p>-</p> <p>- least square fitting, conjugate gradient method</p>		
<u>(Learning Outcomes)</u>		
<p>가</p> <p>1. , ,</p> <p>2. -</p> <p>3. -</p>		
[3] (Course Methods)		
<u>(Teaching and Learning Methods)</u>		
(Teaching and Learning Methods)	가 (Additional Description)	
(Lecture)		
<u>(Assignments)</u>		
(Assignments)	(No.)	(, ,)(Assignments Description)
(Report)	4	

(Textbooks, Reading, and other Materials)					
(Textbook/Reference)	(Title)	(Author)	/ (Year of Publication/etc)	/ (Publisher/Name of Journal)	/ (No. of Edition)
(Main Textbook)	Python	Jaan Kiusalaas	2020		
[4] 가 (Student Assessment)					
가 (Assessment Item)	가 (%) (Assessment Ratio)	가 (Additional Description)			
(Final Exam)	40				
(Assignment)	40				
(Attendance)	10				
/ (Participation/Attitude)	10				
[5] (Course Schedule)					
(Week)	(Instructor)	(Topic & Content)	(Student Assignment)	가 (Additional Description & Instructor Assignment)	
1				- e	
2				-e - e	
3		Euclid Geometry1		, , , , 3/30	
4		Euclid Geometry 2		Project1 4/6	
5				, ,	
6				, affine transformations	
7				(, ,)	
8					
9		(Linear System)		e b = Ax decomposition (LU decomposition)	
10		(Interpolation)		e Polynomial interpolation, Bezier interpolation	
11				e Curves, Spline	
12		(Approximation)		e Least square fitting	

(Week)	(Instructor)	(Topic & Content)	(Student Assignment)	가 (Additional Description & Instructor Assignment)
13		(Differential equation)		e
14				e F = ma ,
15		(Optimization)		e Conjugate Gradient Method
16				
[6] (Guide to Learning)				
(Previous Exam Samples)				
< 가 >(<Download Additional Sample>)				
가 .				
(Engineering Education)				
(Learning Outcomes)				
: 80 : 20				
<u>(Title)</u>				

(Objective)

(Restrictions)

가 (Assessment Method)

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(In pursuant to the Article 71 ‘Discipline ’of the Chung-Ang University Regulations, and Article 47 ‘Punishment for Cheating during Examination ’under Chapter 6 of the Academic Affairs Management Rules, any student caught engaging in academic misconduct during an exam will be subject to disciplinary action.)

1. : , , , 가
2. : , 가
3. / : 가 , 가
4. : 02-820-6577~9(), 031-670-4816()
(cauable)

In this class, students with disabilities are eligible for reasonable accommodations depending on the type and severity of disability. If you wish to receive accommodations listed below, please contact the Support Center for Students with Disabilities.

1. Visual Impairment: Braille, large print, electronic class materials, volunteer note-taker, adjustments in assessment practices, etc.
2. Hearing Impairment: Volunteer note-taker, stenographer, adjustments in assessment practices, etc.
3. Physical Disabilities/Brain Lesions: Classrooms with wheelchair access, volunteer note-taker, adjustments in assessment practices, etc.
4. Accommodations for students with other psychiatric disabilities or health impairments can be arranged through the Support Center for Students with Disabilities after consultation.
Inquiry: 02-820-6577~9 (Seoul Campus), 031-670-4816 (Anseong Campus)
- KakaoTalk Plus Friend ID: @cauable