수 업 계 획 서(Syllabus)

2022 학년도   2 학기

교과목 번호 (Course No.)	HBE01204	교과목명 (Course Title)		경제수학		강좌번호 (Course No.)		5768
개설학과 (Department Major)	경제학과	개설학년/학기 (Year/Semester)		1학년 / 2학기		학점/시간 (Credit/Hour)		3 / 3
강의시간 / 강의실 (Lecture Time/ Classroom No.)					실험실 (Laboratory Location)			
상담시간 (Office Hours				집중수업 여부		해당없음		
담당교수 (Lecturer)		연구실(전화) (Office(Phone))			e-mail			

교육영역 (Course Type)	교양 (Liberal Arts)	전공 (Major)	수업방식 (Course Composition)	강의 (Lecture)	실험 (Experiments)	발표 (Presentation)	협동학습 (Team Project)	기타 (Others)
		0		0				

교과목 교육목표 (Course Objectives)	This class is designed for undergraduate students who are not yet familiar with both economics and mathematics. The textbook and the level of the mathematical analysis are carefully chosen for them to proceed with gradual understanding. Throughout whole lessons, it is expected that the students learn and absorb essential logic and knowledge of mathematical economics for themselves solving practical examples and problem sets. After completion of this class, their thorough understanding of the diverse principles of mathematics related to economics will guide and help them to move forward to the next intermediate level of economics. Also, from the textbook and lectures presented in English, a clear understanding of the terminology used in modern economics will be generated.
교과목개요 (Course Description)	The mathematical approach is essential for modern economics. This class introduces the essential mathematics for economic analysis. Starting from the basic linear equations, matrices operation, differentiation and integration are presented to the undergraduate students. Related to economic issues such as market equilibrium, marginal utility, optimal choice, and so on, mathematical knowledge from linear algebra, calculus, and optimization principles are delivered in the lectures.

수업진행방법 (해당사항 전체선택)	☐ 동영상(LMS)	☐ 실시간 화상강의	√ 대면수업
	수강사이트 https://lms.mju.ac.kr 통합로그인	시스템명 : URL :	※ 강의실 출석

선수과목 및 지식 (Prerequisite)	No requirements.

신 교육기법활용 (Use of new edudation methods)	Flipped Learning (플리드러닝)	Blended Learning (블렌디드러닝)	PBL(Problem Based Learning)	기타(Etc)

성적평가방법 (Evaluation)	출석 (Attendance)	과제물/ 보고서 (Assignments/ Reports)	수시시험 및 중간고사 (Quiz포함) Exams (periodically throughout the semester) (Including Quiz) and Mid-term Exam	학기말시험 (Final Exam)	발표 (Presentation)	기타 (Others)	합계 (Total)
	10	10	40	30	0	10	100 %
	기타내용 (Remark)	Participation (Positive attitude and contribution including questions and comments in class)					

교과목교육목표 성취도평가방법 (Evaluation on the extent to which course objectives have been achieved)	Exam and quiz:: Quiz 1 and 2 (total 10%) + midterm exam(30%), final exam(30%). Assignments: 1,2,3,4 (total 10%) Attendance: By relative measurement for class attendance (10%) Participation: Class participation, contribution, attitude, and freestyle cover letter (10%) Additional bonus or penalty: For special cases such as extraordinary achievement(bonus), cheating(penalty), or offensive manner(penalty). By comprehensive assessment after draft final score. (up to +-10%)

교재및 참고도서 (Textbook and & Reference Books)	주교재 (Required Textbook)	서명 (Title)	MATHEMATICS FOR ECONOMICS AND BUSINESS (Paperback)		
		저자명 (Aughor)	JACQUES IAN (지은이)	출판사명 (Publisher)	Pearson Academic Computing
		ISBN	9781292191669	출판년도 (Yearof Publication)	2018
	부교재 (Supplementary Textbook)	서명 (Title)	경제경영을 위한 수학 – 제8판 (주교재의 번역판)		
		저자명 (Aughor)	Ian Jacques (지은이), 빈기범, 설윤, 박성용, 이용주, 임병화 (옮긴이)	출판사명 (Publisher)	한티미디어
		ISBN	9788964213063	출판년도 (Year of Publication)	2017
	참고도서 (Reference Books)	서명 (Title)	Fundamental Methods of Mathematical Economics (Paperback, 4th Edition)		
		저자명 (Aughor)	Kevin Wainwright, Alpha C. Chiang (지은이)	출판사명 (Publisher)	McGraw-Hill Education
		ISBN	9780071238236	출판년도 (Year of Publication)	2005

주 별 진 도 계 획 (Lecture Plan)		
	주제 및 수업 핵심 내용 (Topics & Lecture Contents)	학습자료 및 과제 (Learning materials Assignments)
제1주 (Week1)	Linear equations 1	* Textbook(8th, 9th ed. or Korean version)
제2주 (Week2)	Linear equations 2	Cover letter(In Korean or English/ Freestyle)
제3주 (Week3)	Matrices 1	
제4주 (Week4)	Matrices 2	
제5주 (Week5)	Non-linear equations 1	Assignment 1
제6주 (Week6)	Non-linear equations 2	
제7주 (Week7)	Mathematics of finance1	
제8주 (Week8)	Mathematics of finance 2/ Midterm exam	Assignment 2
제9주 (Week9)	Differentiation 1	
제10주 (Week10)	Differentiation 2	
제11주 (Week11)	Partial differentiation 1	
제12주 (Week12)	Partial differentiation 2	Assignment 3
제13주 (Week13)	Partial differentiation 3	
제14주 (Week14)	Integration 1	
제15주 (Week15)	Integration 2/ Final exam	Assignment 4
제16주 (Week16)		
보강 (필요시) (Make-up Class,when necessary)		

전공(핵심)역량 및 명지핵심역량의 교과목과의 연계성

(Relevance between the courses in the category of "Major(Core)"and "Myongji Core Competence)
*Myongji MJU 2025 Myongji "Core Competence": "MJU's mid- to long-term Development Plan to improve its quality of education and infrastructures

순번	전공(핵심)역량 (Courses in the category of Major(Core))	역량비율 (100%)	명지핵심역량 (Courses in the category of Myongji Core Competence)
1	[자기계발]문제 상황을 진단하고 이를 해결하기 위해 스스로 자신을 관리하는 능력	25 %	자기주도
2	[지식탐구] 자원, 정보 기술을 효율적으로 수집, 분석하고 활용하는 능력을 기초로 전문지식을 습득하는 능력	25 %	실용
3	[융복합] 서로 다른 여러 가지 아이디어를 조합해 새로운 가치를 창출하는 능력	25 %	융합
4	[문제해결] 창의적 사고력을 토대로 분석, 통합하여 다양한 문제를 해결하는 능력	25 %	창의

참 고 사 항 (Important information)	
수강생 유의사항 (Information for Students)	1. 각 교과목은 수업일수 4/5이상(군 휴학자는 2/3) 출석일 때 성적취득이 가능하다. (1. Credits can be obtained only when students attend at least 4/5 (2/3 for students on leave for military purposes) of the lecture.) 2. 시험 부정행위 및 기타 부정한 방법으로 취득한 교과목의 성적은 학칙시행규칙 제100조에 의거하여 F처리 또는 취소한다. (2. When a student is caught in the acts of cheating, plagiarism, unauthorized collaboration, or other forms of academic dishonesty, he/she will be assigned a failing grade or F for the class in which he/she was caught in the act according to the University regulations.)
장애학생 수업안내 (Students with Disabilities)	장애학생은 학기 첫 주에 교과목 담당교수와의 면담을 통해 출석, 강의, 과제 및 시험에 관한 교수학습 지원사항을 요청할 수 있으며 요청된 사항에 대해 담당교수 또는 장애학생지원센터를 통해 지원받을 수 있습니다. (Students with disabilities may request for academic support(i.e. attendance, lecture, assignments, exams, etc.) from his/her assigned advisors during the first week of the class. This request is to be filed through the Center for Students with Disabilities.)
기타사항 (Remarks)	강의계획안의 내용은 추후 변경될 수 있습니다. (Syllabus is subject to changes.)