San José State University Department of Economics ECON104, Mathematical Methods for Economics Spring 2022

Instructor :	Aidin Hajikhameneh
Of ce Location:	DMH 142
Email :	aidin.hajikhameneh@sjsu.edu
Online Of ce Hours :	Tuesday, 12:00pm-1:00pm (through Canvas); and by appointment
Class Days/Time :	Mo 10:30AM - 1:15PM
Classroom:	DMH 165
Prerequisites :	ECON 1A, ECON 1B, & MATH 30 or MATH 71

1 Course Description

1.1 Catalog Description

Applications of linear algebra and differential calculus to economic analysis. Topics include market equilibrium, properties of production functions, multipliers, optimization methods, comparative statics analysis. Prerequisite: ECON 1A, ECON 1B, & MATH 30 or MATH 71

1.2 Additional Description

Mathematics and mathematic modeling are essential components of an economist's toolkit. The main objective of this course, hence, is to provide students with the basic mathematical knowledge required to analyze economic problems. To this end, during the semester, we will mainly focus on the following topics: single and several variable calculus, calculation of derivatives (including partial derivatives), optimization (constrained & unconstrained), matrix algebra, and linear programming.

SJSU classes are designed such that in order to be successful, it is expected that students will spend, for each unit of credit, a minimum of forty- ve hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related

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4 Of ce Hours via Zoom on Canvas

I have synchronous of ce hours via Zoom in Canvas on Tuesdays from 12:00 to 1:00 pm. This is an excellent opportunity to interact with your fellow students and me in real time. To join of ce hours from PC, Mac, Linux, iOS or Android, use the following links and password:

https://sjsu.zoom.us/j/89062267866?pwd=WGw3a2hvRk1KdnN1dEs0dEhxOXRVQT09 Password: 980826

5 Assignments and Grading Policy

Grades for this course are composed of three homeworks, two midterms, and a nal exam. The grading rubric and a description of each component is provided below:

Grade Breakdown :

only covers matrix algebra and linear programming. Exams will be mainly composed of problem-solving questions. The best way to prepare is to review all homework assignments, study all of the readings, and practice with some of the questions out of the primary textbook.

5.3 Grading Criterion

Your grade is determined at the end of the semester based on your performance on homework assignments (30%) and three exams (70%). Grades will be curved in the end of semester as needed. Letter grades will be determined as shown in Table 1:

Category	Letter Grade	Numerical Grade
А	A+	97-100
	A	93-96
	A	90-92
В	B ⁺	87-89
	В	83-86
	В	80-82
С	C ⁺	77-79
	С	73-76
	С	70-72
D	D+	67-69
	D	63-66
	D	60-62
F	F	Below 60

Table 1: Grading Criteria.

6 University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Of ce of Graduate and Undergraduate Programs' Syllabus Information web page.

7 MYSJSU Messaging

Copies of the syllabus, assignments, notes etc. can be found on Canvas Leaning Management System. Check the Canvas for updates regularly.