MATH 135: Mathematics for Business
Spring 2025 Course Syllabus

NJIT Academic Integrity Code: All Students should be aware that the Department of Mathematical Sciences takes the University Code on Academic Integrity at NJIT very seriously and enforces it strictly. This means that there must not be any forms of plagiarism, i.e., copying of homework, class projects, or lab assignments, or any form of cheating in quizzes and exams. Under the University Code on Academic Integrity, students are obligated to report any such activities to the Instructor.

COURSE INFORMATION

Course Description: Intended for students with major offered by SOM. An introduction to mathematics of business, principles of differential and integral calculus, and optimization.

Number of Credits: 3

Prerequisites: MATH 107 with a grade of C or better or MATH 110 with a grade of C or better or NJIT placement.

Course-Section and Instructors:

Course-Section	Instructor
Math 135-102	Professor D. Hussein

Office Hours for All Math Instructors: Spring 2025 Office Hours and Emails

Required Textbook:

Title	*Finite Mathematics & Calculus with Applications*
Author	Margaret Lial
Edition	11th
Publisher	Pearson
ISBN #	9780135904602
Notes	w/ MyMathLab

University-wide Withdrawal Date: The last day to withdraw with a **W** is **Monday, April 7, 2025**. It will be strictly

enforced.

COURSE GOALS

Course Objectives: An introduction to mathematics of business, principles of differential and integral calculus, and optimization

Course Assessment: The assessment of objectives is achieved through homework, quizzes, and common examinations with common grading.

POLICIES

DMS Course Policies: All DMS students must familiarize themselves with, and adhere to, the Department of Mathematical Sciences Course Policies, in addition to official university-wide policies. DMS takes these policies very seriously and enforces them strictly.

Grading Policy: The final grade in this course will be determined as follows:

Homework	12%
Quizzes	18%
Midterm Exam I	20%
Midterm Exam II	20%
Final Exam	30%

Your final letter grade will be based on the following tentative curve.

A	90 - 100	**C**	65 - 74
B+	85 - 89	**D**	55 - 64
B	80 - 84	**F**	0 - 54
C+	75 - 79		

Attendance Policy: Attendance at all classes will be recorded and is **mandatory**. Please make sure you read and fully understand the Math Department's Attendance Policy. This policy will be strictly enforced. Each class is a learning experience that cannot be replicated through simply "getting the notes."

Religious Observance: NJIT is committed to supporting students observing religious holidays. Students must notify their instructors in writing of any conflicts between course requirements and religious observances, ideally by the end of the second week of classes and no later than two weeks before the anticipated absence.

Homework: Homework is an expectation of the course.

Calculus is learned by solving problems. Homework assignments are completed online. The online assignments can be completed at https://mlm.pearson.com/northamerica/mymathlab/. In order to access the online assignments

you need to have a student access code. Access codes are included with a new book that is bundled with MyMathLab; codes can be purchased separately from the textbook at the campus bookstore or online at the course website. If you buy a new book from another source make sure it is bundled with MyMathLab.

NOTE: Homework Assignments are DUE frequently (at least weekly) at the dates and times specified online and by your instructor.

How to get started with MyMathLab

http://m.njit.edu/Undergraduate/UG-Files/MML_Getting_Started.pdf http://m.njit.edu/Undergraduate/UG-Files/Technology_Tips.pdf

Quiz Policy: Every week there will be a short quiz on the topics presented the previous week. There are no make-up quizzes. In case of an excused absence, the quiz will not be included in the final grade.

Exams: There will be two midterm exams held in class during the semester and one comprehensive final exam. Exams are held on the following days:

Midterm Exam I	TBA
Midterm Exam II	TBA
Final Exam Period	May 10 - May 16, 2025

The final exam will test your knowledge of all the course material taught in the entire course. Make sure you read and fully understand the Math Department's Examination Policy. This policy will be strictly enforced.

Makeup Exam Policy: There will be **NO MAKE-UP QUIZZES OR EXAMS** during the semester. In the event an exam is not taken under rare circumstances where the student has a legitimate reason for missing the exam, the student should contact the Dean of Students office and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc. clearly stating the date AND time of the mitigating problem. The student must also notify the Math Department Office/Instructor that the exam will be missed.

Cellular Phones: All cellular phones and other electronic devices must be switched off during all class times.

ADDITIONAL RESOURCES

Math Tutoring Center: Located in the Central King Building, Lower Level, Rm. G11 (See: Spring 2025 Hours)

Further Assistance: For further questions, students should contact their instructor. All instructors have regular office hours during the week. These office hours are listed on the Math Department's webpage for Instructor Office Hours and Emails.

Accommodation of Disabilities: The Office of Accessibility Resources and Services (OARS) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT.

If you need accommodation due to a disability, please contact the Office of Accessibility Resources and Services at oars@njit.edu, or visit Kupfrian Hall 201 to discuss your specific needs. A Letter of Accommodation Eligibility from the office authorizing student accommodations is required.

For further information regarding self identification, the submission of medical documentation and additional support services provided please visit the Office of Accessibility Resources and Services (OARS) website at:

https://www.njit.edu/accessibility/

Important Dates (See: Spring 2025 Academic Calendar, Registrar)

Date	Day	Event
January 21, 2025	Tuesday	First Day of Classes
January 27, 2025	Monday	Last Day to Add/Drop Classes
March 16, 2025	Sunday	Spring Recess Begins
March 22, 2025	Saturday	Spring Recess Ends
April 3, 2025	Thursday	Wellness day
April 7, 2025	Monday	Last Day to Withdraw
April 18, 2025	Friday	Good Friday - No Classes
April 20, 2025	Sunday	Easter Sunday - No Classes Scheduled
May 6, 2025	Tuesday	Thursday Classes Meet
May 7, 2025	Wednesday	Friday Classes Meet
May 7, 2025	Wednesday	Last Day of Classes
May 8, 2025	Thursday	Reading Day 1
May 9, 2025	Friday	Reading Day 2
May 10 - May 16, 2025	Friday to Thursday	Final Exam Period

Course Outline

Lecture	Lecture #	Sections	Topic
1	1	R.2	Factoring
		R.3	Rational Expressions
		R.4	Quadratic Equations
	2	3.1	Graphing Linear Inequalities
		3.2	Solving Linear Programming Problems Graphically

2	3	10.1	Properties of Functions
	4	10.2	Quadratic Functions
3	5	10.4	Exponential Functions
	6	10.5	Logarithmic Functions
4	7	5.1	Simple and Compound Interest
	8	11.1	Limits
5	9	11.2	Limits (Continued)
	10	11.2	Continuity
6	11		Exam Review
	12		**MIDTERM EXAM 1**
7	13	11.3	Rate of Change
8	14	12.1	Techniques of finding Derivative
	15	12.1 (cont)	Rules for Differentiation
	16	12.2	The Derivative of Product Rule and the Quotient
9	17	12.3	The Chain Rule
	18	13.2	Relative Extrema
10	19	14.1	Absolute Extrema on a Closed Interval
	20	13.3	Higher Derivatives, Concavity, and Second Derivative Test
11	21		Exam Review
	22		**MIDTERM EXAM 2**
12	23	14.2	Applied of Extrema
	24	15.1	The Indefinite Integral
13	25	15.2	Integration with Initial Conditions
14	26	15.4	The Fundamental Theorem of Integral Calculus
	27	16.2	Average Value of a Function
15	28		**Catch Up/Review**
	29		***FINAL EXAM***