Tab 1

MATH 135: Calculus for Business
Fall 2025 Course Syllabus

NJIT Academic Integrity Code: Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: NJIT Academic Integrity Code.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu

COURSE INFORMATION

Course Description: Intended for students with majors 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 135-001	Professor S. Nair

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

Required Textbook:

Title	*Finite Mathematics and Calculus with Applications*
Author	M. Lial, R. Greenwell, N. Ritchey
Edition	11th
Publisher	Pearson

ISBN #	9780137419333
Notes	w/ MyMathLab

University-wide Withdrawal Date: The last day to withdraw with a **W** is **Monday, November 10, 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	Week 5-6
Midterm Exam II	Week 10
Final Exam Period	December 14 - December 20, 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: Fall 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: Fall 2025 Academic Calendar, Registrar)

November 25, 2025	Tuesday	Thursday Classes Meet
November 26, 2025	Wednesday	Friday Classes Meet
November 27 to November 30, 2025	Thursday to Sunday	Thanksgiving Recess - Closed
December 11, 2025	Thursday	Last Day of Classes
December 12, 2025	Friday	Reading Day 1
December 13, 2025	Saturday	Saturday Classes Meet
December 14 to December 20, 2025	Sunday to Saturday	Final Exam Period

Course Outline

	Lect.	Sect	Topic	
1	1	R3	Rational Expressions	# 7, 9, 15, 19, 21, 23
		R4	Equations	# 11, 13, 17, 19, 23, 29, 31
		R5	Linear Inequalities	# 7, 9, 11, 13, 17, 21, 23
	2	3.1	Graphing Linear Inequalities	# 5, 12, 15, 19, 25, 27, 29, 34, 35, 54, 57
		3.2	Solving Linear Programming Problems Graphically	# 11, 13, 15
		3.3	Applications	# 1, 5, 8, 9, 10
2	3	10.1	Properties of Functions	# 31, 33, 43, 45, 49, 51, 55, 57, 59, 61, 63, 81
	4	10.3	Polynomial and Rational Functions	# 31, 35, 39, 41, 45, 47, 53, 57
	5	10.4	Exponential Functions	# 17, 19, 21, 23, 25, 29, 31, 41, 44, 47
	6	10.5	Logarithmic Functions	# 11, 17, 21, 25, 27, 31, 33, 37, 39, …
4	7	10.6	Growth and Decay	# 15, 18, 19, 23
	8	11.1	Limits	# 11, 13, 15, 17, 39-61 odd
5	9	11.1	Limits (Continued)	# 11, 13, 15, 17, 39-61 odd
	10	11.2	Continuity	# 15, 17, 19, 29, 33, 35, 51
6	11		Exam Review	
	12		**MIDTERM EXAM 1**	
7	13	11.4	The Definition of the Derivative	# 1, 13, 15, 17
	14	11.5	Graphical Differentiation	# 15, 17, 19
8	15	12.1	Techniques for finding Derivatives	# 7, 9, 11, 13, 15, 29, 43, 57*, 58*
	16	12.2	The Product Rule and the Quotient Rule	# 5-23 odd, 51, 53
9	17	12.3	The Chain Rule	# 27, 31, 34, 37, 39, 41, 59
		12.4	Derivatives of Exponential Functions	# 9, 13, 15, 21, 26, 52
	18	12.5	Derivatives of Logarithmic Functions	# 5, 7, 11, 15, 23, 71, 72, 74
10	19		Exam Review	
	20		**MIDTERM EXAM 2**	
11	21	13.1 13.2	Increasing and Decreasing Functions Relative Extrema	13.1 # 9, 19, 23, 27, 33, 53, 54, 55, 57 13.2 # 13,17, 25, 27, 35, 43, 51, 55, 56, 57, 59
	22	13.3	Concavity and Second Derivative Test	13.3 # 67, 69, 71, 86

	Lect.	Sect	Topic	
1	1	R3	Rational Expressions	# 7, 9, 15, 19, 21, 23
		R4	Equations	# 11, 13, 17, 19, 23, 29, 31
		R5	Linear Inequalities	# 7, 9, 11, 13, 17, 21, 23
	2	3.1	Graphing Linear Inequalities	# 5, 12, 15, 19, 25, 27, 29, 34, 35, 54, 57
		3.2	Solving Linear Programming Problems Graphically	# 11, 13, 15
		3.3	Applications	# 1, 5, 8, 9, 10
12	23	14.2	Applications of Extrema	14,2 # 9, 11, 18, 19
	24	15.1	Antiderivatives	# 11, 13, 19, 25, 37, 39, 41, 49, 51, 53, 55, 57, 59, 63
13	25	15.4	The Fundamental Theorem of Integral Calculus	# 7, 9, 15, 19, 21, 27
	26	16.2	Average Value of a Function	# 29, 33, 39, 41
14	27		*Review for* **Final Exam**	
	28		***Review for FINAL EXAM***	