MATH 599: Teaching Mathematics
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: Required of all master's and doctoral students in Mathematical Sciences who are receiving departmental or research-based awards. Provides students with the skills needed to communicate effectively and to perform their teaching and related duties. Students are exposed to strategies and methods for communicating and for teaching undergraduate mathematics, and they are required to practice and demonstrate these techniques. Not counted for degree credit.

Number of Credits: 3

Prerequisites: Departmental approval.

Course-Section and Instructors:

Course-Section	Instructor
Math 599-001	Professor M. Cirillo

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

Required Textbook:

Title	*Teaching Math Colleges and Universities Case Studied Today's Classroom*
Author	Friedberg
Edition	Grad Ed.

Publisher	American Math Society
ISBN #	978-0821828236

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:

- The course assists and supports teaching assistants in the performance of their duties by developing their conceptual understanding, essential skills and practical experience required for teaching mathematics at the university level.
- The course lays the foundations for students planning careers requiring the effective communication of mathematical ideas.

Course Outcomes: Students will be able to:

- conceptualize and articulate the essential considerations and competencies associated with teaching undergraduate mathematics such as eliciting and responding to student thinking, grading, proctoring, leading interactive tutoring sessions and recitations, and commanding a room full of learners
- develop basic technical skills with tools for teaching mathematics such as LaTeX, MATLAB, and Canvas.

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.

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.

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.

ADDITIONAL RESOURCES

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 an 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)

Date	Day	Event
September 1, 2025	Monday	Labor Day
September 2, 2025	Tuesday	First Day of Classes
September 8, 2025	Monday	Last Day to Add/Drop Classes
November 10, 2025	Monday	Last Day to Withdraw
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

This course meets twice per week: Monday 8:30 a.m – 9:50 a.m. and Friday 10:00 a.m.-11:20 a.m. Monday meetings address the mathematical infrastructure needed to teach mathematics successfully at the university level. Topics include mathematical typesetting (LaTeX), mathematical software such as MATLAB, and the use of computer languages such as R and Python in scientific computing. Friday meetings will focus on discussion and practice of classroom and tutoring situations. Use of online tools for teaching, such as Canvas and MATLAB grader, will also be considered. A typical Friday meeting will involve a discussion of a case study from the textbook, practice recitations (by students), and simulated tutoring situations. A final presentation making use of properly formatted slides and illustrative graphics is required. The schedule of practice lectures and presentations will depend on the number of students in the class and will be prepared early in the semester. A Satisfactory Course grade will be dependent on class attendance and completing all course assignments at a Satisfactory level.