MATH 599: Teaching Mathematics
Fall 2021 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: 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 599-003	Professor J. Luke

Office Hours for All Math Instructors: Fall 2021 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 **Wednesday, November 10, 2021**. 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 of the processes associated with teaching mathematics such as grading, proctoring and presentation,
- develop basic 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.

ADDITIONAL RESOURCES

Math Tutoring Center: Located in the Central King Building, Lower Level, Rm. G11 (See: Fall 2021 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 are in need of accommodations due to a disability please contact Scott Janz, Associate Director of Disability Support Services at 973-596-5417 or via email at scott.p.janz@njit.edu. The office is located in Kupfrian Hall, Room 201. A Letter of Accommodation Eligibility from the Office of Accessibility Resources and Services office authorizing your accommodations will be 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/studentsuccess/accessibility/

Important Dates (See: Fall 2021 Academic Calendar, Registrar)

Date	Day	Event
September 1, 2021	Wednesday	First Day of Classes

September 4, 2021	Saturday	Saturday Classes Begin
September 6, 2021	Monday	Labor Day
September 8, 2021	Wednesday	Monday Classes Meet
September 8, 2021	Wednesday	Last Day to Add/Drop Classes
November 10, 2021	Wednesday	Last Day to Withdraw
November 25 to November 28, 2021	Thursday to Sunday	Thanksgiving Recess - Closed
December 10, 2021	Friday	Last Day of Classes
December 13 and December 14, 2021	Monday and Tuesday	Reading Days
December 15 to December 21, 2021	Wednesday to Tuesday	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 will include mathematical typesetting (LaTeX), mathematical software such as MATLAB, and the use of computer languages such as C and FORTRAN in scientific computing. Friday meetings will focus discussion and practice of classroom and tutoring situations. A typical Friday meeting will involve a discussion of a case study from the textbook, practice lectures (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.