MATH 107: University Mathematics A
Summer 2023 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: Linear functions, equations, inequalities, systems of linear equations, quadratic equations, elementary functions, graphing functions.

Number of Credits: 3

Prerequisites: None

Course-Section and Instructors:

Course-Section	Instructor
Math 107-041	Professor T. Sherman

Office Hours for All Math Instructors: Office Hours and Emails

Required Textbook:

A. Precalculus Version 3 Corrected	*http://stitz-zeager.com/szprecalculus07042013.pdf*

University-wide Withdrawal Date: Please see the Summer 2023 Academic Calendar for the last day to withdraw based on the summer session you are registered for.

COURSE GOALS

Course Objectives

- Students should (a) improve their algebra skills engineering (b) learn about lines and slope,(c) understand many practical applications of systems of equations, (d) Students should gain an appreciation for the importance of trigonometry in scientific, engineering, and other applications., (e) learn about logarithmic and exponential functions and understand their real world applications.

Course Outcomes

- Students have improved logical thinking and problem-solving skills.
- Students have a greater understanding of the importance of algebra, trigonometry and logarithms and some real world applications.
- Students are prepared for General Calculus.

Course Assessment: The assessment of objectives is achieved through homework, quizzes, and 3 examinations.

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	15%
Quizzes/Class Participation	20%
Exam I	30%
Final Exam	35%

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. Attending online conferences and submitting the video assignments will count toward attendance.

Homework: Homework is an expectation of the course.

Quiz Policy: Quizzes will be given throughout the semester. They will be based on the video lectures, homework, and the canvas conferences.

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

Midterm Exam	June 21, 2023
Final Exam	July 17, 2023

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: Summer 2023 Hours)

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/accessibility/

Important Dates (See: Summer 2023 Academic Calendar, Registrar)

Date	Day	Event
May 22, 2023	Monday	**Full, First, and Middle Summer** Session Begins
May 24, 2023	Wednesday	Last Day to Add/Drop for **First Summer** Session
May 26, 2023	Friday	Last Day to Add/Drop for **Middle Summer** Session
May 29, 2023	Monday	Last Day to Add/Drop for **Full Summer** Session
May 29, 2023	Monday	Memorial Day - University Closed/No Classes Scheduled
June 10, 2023	Saturday	Last Day to Withdraw from **First Summer** Session
June 16, 2023	Friday	Last Day to Withdraw from **Middle Summer** Session
June 16, 2023	Friday	Juneteenth - University Closed/No Classes Scheduled

June 26, 2023	Monday	Last Day of Classes for **First Summer** Session
June 30, 2023	Friday	Last Day to Withdraw from **Full Summer** Session
July 4, 2023	Tuesday	Independence Day - University Closed/No Classes Scheduled
July 5, 2023	Wednesday	**Second Summer** Session Begins
July 6, 2023	Thursday	Last Day to Add/Drop for **Second Summer** Session
July 17, 2023	Monday	Last Day of Classes for **Middle Summer** Session
July 20, 2023	Thursday	Last Day to Withdraw for **Second Summer** Session
August 8, 2023	Tuesday	Last Day of Classes for **Full and Second Summer** Session

Course Outline

Lecture Date	Section #	Homework
5/22	1.1 and 1.2	*1.1 #20, 22, 23, 24, 37a (graph the 3 points)*
5/23	1.3	*1.3 #1, #13-18, #24-32, #33-35*
5/25	1.4	*1.4 #11, 12, 13, 19, 26, 27, 29, 31, 35, 36, 38-46,*
5/30	1.5, 1.6	*1.5 #21, 23, 24, 26, 29, 31, 34* *1.6 #1-9, 12*
6/1	1.6, 1.7	*1.6 #13, 14, 15, 19, 20, #42-57* *1.7 #19-23, #38, 41, 44*
6/5	2.1	*2.1 #1, 2, 11, 13, 15, 21, 23, 25, 30, 44, 46, 61, 63, 65, 67, 69*
6/6	8.1	*8.1 #1-6, #10, #11, #12*
6/8	2.3	*2.3 #1-8, #23*
6/12	3.2	*3.2 #1-6, 11-13*
6/13	3.3	*3.3 #1-6 (use either method)*
6/15	Review	
6/19		*Midterm 1*
6/20	6.1	*6.1 #16-20, 27, 29, 32, 43, 45,*
6/22	6.2	*6.2 #1-3, 10, 16, 17, 18, 19, 29,*

6/26	6.3	*6.3 #1-12*
6/27	6.4	*6.4 #1-16, 22*
6/29	10.1	*10.1 #9, 11, 13, 16, 17, 18, 19, 20, 33, 34, 37, 38, 42, 43*
7/3	10.2	*10.2 #1-14, #21-24, #31-34 (just find solutions on [0, 2pi])*
7/6	10.3	*10.3 #1-6, #21-24, #43-46 (just find solutions on [0, 2pi])*
7/10	10.5	*10.5 #1-4, #6, #12*
7/11	11.2, 11.3	*11.2 #1, 5* *11.3 #1, 2, 3*
7/17	Review	
7/18	Final Exam	

Updated by Professor T. Sherman - 04/24/2023
Department of Mathematical Sciences Course Syllabus, Summer 2023