Syllabus

MATH 100L — Essentials of College Algebra I Lab

Section 61 · Fall 2026 · University of Tennessee at Martin

Basic Information

Course basics for MATH 100L section 61

Course	MATH 100L, Section 61 — Essentials of College Algebra I Lab
Credit hours	1
Meets	Monday and Wednesday, 4:00–4:50 p.m., Latimer-Smith 305
Required text	*Essentials of College Algebra*, 12th Edition, by Lial, Hornsby, and Schneider — the same text used in your MATH 100 lecture section.
Calculator	A TI-84 graphing calculator is required. Calculators with a Computer Algebra System (CAS) are prohibited, including the TI-89, TI-92, and TI-Nspire.

Instructor

Dr. Shalmali Bandyopadhyay
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Office Hours

Weekly office hours in Latimer-Smith 360

Day	Times
Monday	9:00–10:00 a.m. and 11:00 a.m.–12:00 p.m.
Wednesday	8:00–10:00 a.m., 11:00 a.m.–1:00 p.m., and 3:00–4:00 p.m.
Friday	9:00–10:00 a.m. and 11:00 a.m.–1:00 p.m.

Additional times are available by appointment — email me and we will find one. Thursdays are reserved for research, and I do not hold office hours that day.

Course Description

MATH 100L is the laboratory component of MATH 100, Essentials of College Algebra I. You must be enrolled in both a lecture section and a lab section. In lab you will work through guided exercises that support and reinforce the lecture material, and the lab follows a set schedule so that lecture and lab assignments stay correlated.

Catalog description for MATH 100: Functions and their graphs (including polynomial, rational, exponential, and logarithmic), exponents, roots, radicals, rational expressions, factoring polynomials, zeroes of polynomials, solutions of linear and nonlinear equations and inequalities, systems of equations and inequalities, matrices and determinants, inverse functions.

Student Learning Outcomes

The purpose of the mathematics requirement is to teach students to organize, evaluate, and solve problems using both abstract and quantitative approaches. In this course the student will:

1. Use appropriate notation and vocabulary to communicate mathematics.
2. Use symbolic and numerical methods to perform calculations.
3. Solve problems with real-world applications.

Teaching Objectives

The student will:

1. Determine the domain and range of functions and relations.
2. Evaluate and graph functions including linear, quadratic, and polynomial.
3. Read and interpret graphs of functions.
4. Determine the intercepts on the graph of a function.
5. Apply transformations to curve sketching.
6. Solve equations and inequalities involving linear and quadratic functions.
7. Use Synthetic Division on polynomials to find zeros.
8. Apply the Remainder, Factor, and Rational Roots theorems to polynomials.
9. Approximate zeros of polynomials (by use of technology).
10. Solve real-world problems involving functions.
11. Solve inequalities involving functions.
12. Use technology to fit lines and parabolas to points in the xy-plane.

Grading

Your lab grade counts for 20% of your overall MATH 100 course grade. Every lab is worth the same number of points, and your lab grade is the percentage of lab points you earn across the semester.

Dropped Labs and Make-Ups

- Your **three lowest lab grades are dropped automatically.** This is applied after midterm grades are posted.
- You may **make up two labs** missed for unexcused absences. Make-ups are completed during my office hours in LS 360.
- If you know in advance that you will miss a lab, email me before the lab meets.

Attendance and Participation

Labs are hands-on and cannot be reproduced by reading notes, so attendance matters more here than the one credit hour suggests. Come with your TI-84 and the current lab handout. Absences for required campus activities are legitimate provided you notify me in advance.

Course Communications

Email me at **sbandyo5@utm.edu (mailto:sbandyo5@utm.edu)** or use Canvas Messenger. I answer messages received on weekdays within one business day; messages sent after 5:00 p.m. Friday will usually be answered Monday. For technical problems with Canvas or your UTM account, contact the **UTM Help Desk (https://www.utm.edu/helpdesk/)** .

Artificial Intelligence

The use of generative AI tools (Gemini, Claude, Copilot, and similar) in lab sessions is **strictly prohibited**. This is the departmental policy for all MATH 100L sections. The policy governing your MATH 100 lecture section is set by your lecture instructor — see that syllabus.

University Policies

Academic Integrity

The University of Tennessee at Martin has chosen as its primary objective quality undergraduate education. Commitment to this objective must include an obligation by all members of the University community to promote and protect the highest standards of integrity in study, research, instruction and evaluation. Dishonesty or unethical behavior does not belong at an institution dedicated to the promotion of knowledge and learning. Integrity of the academic process requires fair and impartial evaluation by faculty and honest academic conduct by students. Specific integrity attributes can be found on the **Academic Integrity (https://www.utm.edu/offices-and-services/student-conduct/academic-integrity.php)** page.

Standard of Conduct

When persons enroll in The University of Tennessee at Martin, they retain the rights and duties of a citizen. Additionally, they must assume the duties and observe the regulations imposed by the University community. Specific conduct attributes can be found on the **Student Conduct (https://www.utm.edu/offices-and-services/student-conduct/conduct.php)** page.

Disability Services

The University of Tennessee provides reasonable accommodations (academic adjustments and auxiliary aids) to ensure equal access to educational content and university programs for students with disabilities. Students who are approved for accommodations are responsible for requesting accommodation letters be sent to faculty each semester. The Office of Disability Services is located at 448 Clement Hall. Contact: 731.881.7605 or **DisabilityServices@utm.edu (mailto:DisabilityServices@utm.edu)** .

Key Campus Resources

- Undergraduate & Graduate Catalog — academic programs, courses, and policies
- Important Dates — add/drop deadlines and payment dates
- Student Success Center — academic support resources
- Student Health and Counseling Services — mental and physical health services
- Paul Meek Library — databases, course reserves, and research help
- Career Services — career counseling and the Vault job search system

Lab Schedule

Labs meet every Monday and Wednesday. There is no lab on the three dates marked below; all 27 labs meet as scheduled.

MATH 100L Monday/Wednesday lab schedule, Fall 2026

Date	Lab	Topic
Mon, Aug 24	Lab 1	Mathematics Department Placement Test
Wed, Aug 26	Lab 2	Math Lab Syllabus and TI Calculator Basics
Mon, Aug 31	Lab 3	Order of Operations and Laws of Exponents
Wed, Sep 2	Lab 4	Order of Operations and Set Notation
Mon, Sep 7	—	*Labor Day holiday — no lab*
Wed, Sep 9	Lab 5	Plot Points on the xy-plane
Mon, Sep 14	Lab 6	Graph a Function by Plotting Points
Wed, Sep 16	Lab 7	Domain and Range of Relations
Mon, Sep 21	Lab 8	Identify Basic Graphs
Wed, Sep 23	Lab 9	Transformations of Graphs
Mon, Sep 28	Lab 10	Solving Linear Equations

Date	Lab	Topic
Wed, Sep 30	Lab 11	Slope, x-intercept, and y-intercept of a Line
Mon, Oct 5	Lab 12	Find the Equation of a Line
Wed, Oct 7	Lab 13	Determine a Linear Regression Equation
Mon, Oct 12	—	*Fall Break — no lab*
Wed, Oct 14	Lab 14	First, Outer, Inner, Last (FOIL)
Mon, Oct 19	Lab 15	Factor Polynomials by Grouping and Inspection
Wed, Oct 21	Lab 16	Factor Trinomials $Ax^2 + Bx + C$ with $A \neq 1$
Mon, Oct 26	Lab 17	Perform Operations on Complex Numbers
Wed, Oct 28	Lab 18	Quadratic Formula
Mon, Nov 2	Lab 19	Use Algebra in a Real-World Problem
Wed, Nov 4	Lab 20	Vertex, x-intercepts, y-intercepts, and Range
Mon, Nov 9	Lab 21	Features of the Graph of a Quadratic Function
Wed, Nov 11	Lab 22	Graph of a Circle
Mon, Nov 16	Lab 23	Test for Zeros of a Polynomial (Synthetic Division)
Wed, Nov 18	Lab 24	Factor Polynomials where all Zeros are Rational
Mon, Nov 23	Lab 25	Descartes' Rule of Signs, Rational Zeros Theorem, and the Factor Theorem
Wed, Nov 25	—	*Thanksgiving holiday — no lab*
Mon, Nov 30	Lab 26	The relationship between the degree, the sign of the leading coefficient, the multiplicities of the zeros, and the graph of the polynomial
Wed, Dec 2	Lab 27	Test Taking Strategies and Practice Final Exam

The instructor reserves the right to revise, alter, or amend this syllabus as necessary.

Syllabus adapted from the Tennessee Teaching and Learning Center.