MATH 251 Calculus I

Fall 2026

University of Tennessee at Martin

Basic Information

Course Section	MATH 251-002
Course Title	Calculus I
Meeting Time and Place	MTWF 10:00–10:50 AM, LS 200
Course Credit Hours	4

Textbook. *Calculus Volume 1*, OpenStax, ISBN 978-1938168024. Free online at `https://openstax.org/details/books/calculus-volume-1`

Required Materials. A graphing calculator is required. The department recommends a TI-84 series calculator. Calculators that perform symbolic computations, for example the TI-89 and TI-92, are not permitted on exams. Please check with the instructor if you have a different calculator.

Faculty Contact Information

Instructor	Dr. Shalmali Bandyopadhyay
Email	sbandyo5@utm.edu
Office	LS 360

Office Hours, Fall 2026

Day	Times
Monday	9:00–10:00 AM, 11:00 AM–12:00 PM
Wednesday	8:00–10:00 AM, 11:00 AM–1:00 PM, 3:00–4:00 PM
Friday	9:00–10:00 AM, 11:00 AM–1:00 PM

If none of these times work for you, please email me with your availability and I will work with you to find a time.

Course Information

Course Description

Applies to the MATH 251–252 sequence. Limits and continuity. Derivatives and integrals of polynomial, rational, exponential, logarithmic, trigonometric, and hyperbolic functions. Techniques of integration. Conics. Parametric and polar equations. Indeterminate forms and improper integrals. Infinite series, including Taylor series. Must be taken in sequence.

Prerequisites

Two units of high school algebra, one unit of high school geometry, one-half unit of high school trigonometry and appropriate mathematics placement result, OR completion of MATH 170 with a C or better, OR MATH 185 with a C or better.

Course Resources

All course materials, announcements, and grades will be posted on Canvas. The complete day-by-day course schedule, including all topics, exam dates, and quiz due dates, is posted as a page on Canvas. Please check Canvas regularly and ensure your spam filter allows Canvas emails.

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. Courses in this area will enable students to communicate using the language of mathematics. Upon completion of this course, students will:

a. Use appropriate notation and vocabulary to communicate mathematics.

b. Use symbolic and numerical methods to perform calculations.

c. Solve problems with real-world applications.

Teaching Objectives

The student will:

1. Understand and apply the definitions and concepts of limit and continuity of functions.
2. Understand and apply the definition of derivative, Rolle's Theorem, and the Mean Value Theorem.
3. Differentiate both explicitly and implicitly algebraic, trigonometric, logarithmic, and exponential functions.
4. Apply the basic differentiation rules to complex functions.
5. Use derivatives in applications such as approximations, Newton's Method, related rates, optimization, and L'Hôpital's Rule.
6. Use derivatives to determine increasing-decreasing and concavity intervals for functions and use these results as an aid in curve sketching of these functions.
7. Use the Fundamental Theorem of Calculus in definite integral evaluation.
8. Integrate the basic functions including the use of basic substitution techniques.

Course Communications

Course announcements will be posted on Canvas. The best way to contact me is through email at sbandyo5@utm.edu. You can expect a reply via email, or if I see you in class, I may respond in person. If I receive emails on a common issue from multiple students, I will post a reply as a Canvas announcement. For technical issues, contact the UTM Help Desk at `https://utm.teamdynamix.com/TDClient/2421/ITS-Portal/Home/`.

Assessment

Component	Number	Format	Weight
Attendance and In-Class Participation	Every class	In class	15%
Weekly Quizzes	13	Canvas, unproctored	10%
SLO Quizzes	3	In class, on paper, 50 minutes	10%
Reflection Quizzes	3	Canvas	5%
In-Class Exams	6	In class, 50 minutes, 100 points each	30%
Final Exam	1	Comprehensive departmental common exam, 40 multiple choice	30%
Total			**100%**

Attendance and In-Class Participation

Class begins promptly at 10:00 AM and you are expected to be in your seat and ready to participate. Attendance is recorded every class period through Canvas.

Each class includes a worksheet that you complete during class. **Worksheets are available in class only and will not be posted on Canvas under any circumstances.** You must attend class to receive the worksheet.

This category is not attendance alone. To receive credit for a class period you must be present for the full period, actively working the problems on the worksheet, and participating in the work of the class.

You will not receive credit for a class period if you arrive more than 10 minutes after class begins, leave more than 10 minutes before class ends, or are seen using an electronic device during class.

Try at Home Problems

Problems will be assigned at the end of each class. These are not collected and are not graded directly. They are the basis for the weekly quiz, and they are the primary way you prepare for exams. Complete them on the day they are assigned.

Weekly Quizzes

A quiz opens each **Friday at 12:00 AM** and closes **Saturday at 11:59 PM**. Each quiz consists of 10 multiple-choice questions worth 0.5 points each, with a 30-minute time limit and one attempt.

Questions are drawn from that week's Try at Home problems, including problems assigned on Friday. **Do not begin the quiz before your Friday class has met.**

There are 13 quizzes. No quiz is given during the weeks of Fall Break or Thanksgiving. There are no makeups and no extensions. A missed quiz receives a zero.

Quiz	Opens (Friday, 12:00 AM)	Closes (Saturday, 11:59 PM)
Quiz 1	August 28	August 29
Quiz 2	September 4	September 5
Quiz 3	September 11	September 12
Quiz 4	September 18	September 19
Quiz 5	September 25	September 26
Quiz 6	October 2	October 3
Quiz 7	October 9	October 10
Quiz 8	October 23	October 24
Quiz 9	October 30	October 31
Quiz 10	November 6	November 7
Quiz 11	November 13	November 14
Quiz 12	November 20	November 21
Quiz 13	December 4	December 5

These quizzes are unproctored. You are expected to complete them on your own, and the academic integrity policy applies. Their purpose is to ensure the Try at Home problems are completed while the material is current. Exams and the final are proctored and closed-resource, and together they are 60% of your grade. Work you do not do yourself on a quiz is work you will not be able to do on an exam.

SLO Quizzes

There are three SLO quizzes, taken in class on paper during a full 50-minute class period. These assess the departmental Student Learning Outcomes listed above.

Quiz	Date
SLO Quiz 1	Monday, October 19
SLO Quiz 3	Monday, November 2
SLO Quiz 2	Wednesday, November 11

Reflection Quizzes

There are three reflection quizzes on Canvas, worth 5 points each. These ask you to assess your own confidence with the material, identify what has been most difficult, and name a specific action you will take. They are not graded on correctness. Answer them honestly. They exist so that you can identify what is not working while there is still time to change it.

Quiz	Due
Reflection Quiz 1	Monday, September 28
Reflection Quiz 2	Monday, October 26
Reflection Quiz 3	Monday, November 30

Exams

There are six in-class exams and one comprehensive final exam. Each in-class exam is 100 points, taken during a 50-minute class period, and consists of 75 points of multiple-choice questions and 25 points of free response.

Exam	Date
Exam 1	Tuesday, September 8
Exam 2	Tuesday, September 22
Exam 3	Tuesday, October 6
Exam 4	Tuesday, October 27
Exam 5	Tuesday, November 10
Exam 6	Tuesday, November 24

A practice exam with full solutions is posted on Canvas in advance of each exam. **There are no in-class review days.** The practice exam is your preparation.

Detailed solutions are posted on Canvas after each exam. **There are no exam corrections.**

Final Exam

All students in this course will take the Department of Mathematics and Statistics common final exam. The final exam is comprehensive and consists of 40 multiple-choice questions.

Final Exam: Monday, December 7, 5:15–7:15 PM. Room to be announced.

Grading

Grade Breakdown

Category	Weight
Attendance and In-Class Participation	15%
Weekly Quizzes (13)	10%
SLO Quizzes (3)	10%
Reflection Quizzes (3)	5%
In-Class Exams (6)	30%
Final Exam (Comprehensive)	30%
Total	**100%**

Exam Replacement Policy

No exam grade is dropped. Your lowest in-class exam grade may be replaced by your final exam grade if doing so improves your overall grade.

Grading Scale

Grade	Percentage
A	90–100%
B	80–89%
C	70–79%
D	60–69%
F	Below 60%

Course Policies

Electronic Device Policy

No electronic devices are permitted in the classroom. This includes cell phones, smart watches, tablets, laptops, earbuds, and any other electronic devices. The only exception is an approved calculator, which may be used during class, quizzes, and exams.

Devices must be put away and out of sight for the entire class period. **If you are seen using a device during class, you will forfeit your attendance and participation credit for that day. No warnings will be given.**

No Makeup Exams and No Late Work

There are no makeup exams unless you have a school-excused absence or documented medical emergency. If you miss an exam without a valid excuse, you will receive a zero.

Late work is not accepted. All assignments must be submitted by the posted deadline. Submissions after the deadline will receive a zero. Plan ahead and do not wait until the last minute.

Artificial Intelligence Policy

The use of artificial intelligence tools, including but not limited to ChatGPT, Claude, Gemini, Copilot, Wolfram Alpha, Symbolab, Photomath, or any similar AI or solver tools, is **strictly prohibited** on all exams, SLO quizzes, and the final exam. These assessments are proctored and closed-resource. Violations will result in a zero on the assessment, possible failure of the course, and referral to the Office of Student Conduct.

Weekly quizzes are unproctored. You are expected to complete them independently and without AI assistance. Understand that the weekly quizzes exist to prepare you for the proctored exams, which are 60% of your grade. Work you outsource on a quiz is work you will be unable to do when it counts.

How to Be Successful in This Course

1. **Attend every class and work while you are there.** Worksheets are distributed and completed in class only, and they are not posted on Canvas. Attendance and in-class participation together are 15% of your grade, and credit requires working the worksheet problems, not only being present. Arriving more than 10 minutes late or leaving more than 10 minutes early forfeits credit for that day.

2. **Put your phone away before class begins.** You cannot photograph the board, so your notes are the only record you will have. Write down the reasoning, not only the final line.

3. **Complete the Try at Home problems on the day they are assigned.** They are not collected, but each Saturday quiz is built from that week's problems. You have 30 minutes and one attempt, which is not enough time to learn the material during the quiz.

4. **Treat the weekly quiz as an assessment.** One attempt, no retakes, no makeups. Begin only when you are prepared.

5. **Use the practice exam as a rehearsal.** There are no in-class review days. Work the practice exam start to finish, timed and without notes, before consulting the solutions. Reading a completed

solution can create a false sense of understanding.

6. **Read the posted exam and quiz solutions regardless of your grade.** Seventy-five percent of each exam is multiple choice, scored right or wrong with no partial credit. The incorrect options are constructed from common errors, so identifying which one you selected, and why, is where the learning happens. This applies equally when you scored well.

7. **Stay current.** An exam every two weeks means that falling behind becomes apparent immediately. Address gaps in the week they appear rather than in the week before an exam.

8. **Visit office hours early in the semester rather than after a disappointing exam.** LS 360, Monday 9–10 and 11–12, Wednesday 8–10, 11–1, and 3–4, Friday 9–10 and 11–1. The Math Learning Center in LS 202 also offers free tutoring. Bring a specific problem.

9. **Answer the reflection quizzes honestly.** They are not graded on correctness. They exist so that you can identify what is not working while there is still time to change it.

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. Specific integrity attributes can be found at `https://www.utm.edu/offices-and-services/student-conduct/academic-integrity.php`

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 at `https://www.utm.edu/offices-and-services/student-conduct-and-care/faculty-and-staff-resources.php`

Accessibility Resource Center

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 Accessibility Resource Center is located at 430-448 Clement Hall. Contact 731.881.7605 or DisabilityServices@utm.edu.

Key Campus Resources for Students

- **Undergraduate and Graduate Catalog.** Listing of academic programs, courses, and policies.
- **Important Dates.** Add and drop deadlines, payment deadlines.
- **Student Success Center.** Academic support resources.
- **Math Learning Center (MLC), LS 202.** Free tutoring for mathematics courses.

- **Student Health and Counseling Services.** Mental and physical health services.
- **Library.** Access to library resources, databases, course reserves, and services.
- **Career Services.** Career counseling and resources.

Course Assessment

At UTM, it is our collective responsibility to improve the state of teaching and learning. During the semester, you may be requested to assess aspects of this course either during class or at the completion of the class. You are encouraged to respond to these various forms of assessment as a means of continuing to improve the quality of the UTM learning experience.

The instructor reserves the right to revise, alter, or amend this syllabus as necessary. Students will be notified in writing or by email of any such changes.