Calculus I *– MATH 2554-1 · MTWR 8:00-9:50 · BH 2241*

NorthWest Arkansas Community College – Summer 2026

– about me and this course –

Instructor: *Keith Foster · Professor of Mathematics · MS Mathematics, U of A*
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Office Hours and Email: No official Office Hours during the summer. However, if you wish to schedule a time to meet in my office just email me or talk with me directly to set up a time. My office is SC 327.

E-mail is the best way to reach me outside our meeting times since I may not be in the office. I will reply to your email within 24 hours. When you email me, be sure to include the course name in the subject (i.e, subject: "C1") so I can best answer your email.

Course Objectives:

1. To develop proficiency in calculus by:
   a. understanding and evaluating limit of functions
   b. understanding and using derivatives of algebraic and transcendental functions
   c. understanding and evaluating definite and indefinite integrals, including the method of substitution
   d. graphing, in details, functions using calculus methods
   e. solving application problems using rules of differentiation and integration
   f solving basic differentials equations, including separable and first-order linear equations
2. To develop problem solving skills

Course Description: The first course in a three-semester sequence designed to provide comprehensive coverage of differential and integral calculus. Topics include limits and continuity, differentiation with applications, integration with applications, and basic differential equations.

Textbook: *Calculus, Early Transcendental Functions*, Third Edition by Briggs, Cochran and Gillett, Addison Wesley.

Prerequisites: MATH 1203/MATH 1213 OR MATH 1285 with grades of C or better, or appropriate placement scores. A good understanding of concepts from algebra and trigonometric is also required to do well in this course.

– details regarding grading –

Grading for this Course: The numerical grade comes from the following sources:

- Homework: All homework scores will count towards your Homework grade and be scaled out of 50 points.
- *Quizzes*: Periodical quizzes will be graded and scaled to 100 points.
- *Unit Exams*: There will be four unit exams, each worth 100 points (total: 400 points)
- *Final Exam:* The *final exam* is worth 200 points and will be comprehensive.

Percentage score will be this numerical grade out of 750 points. A letter grade will be assigned based on the standard percentage scale:

A 90-100	*C 70-79.9*	*F below 60*
B 80-89.9	*D 60-69.9*	*FP failure due to non-attendance*

Homework/Quizzes Policy: You are expected to work all homework problems assigned in myLabMath (MLM). Additional problems *may be* assigned directly from the textbook. Since this class is a four credit class and meets for only 8 weeks, this may require you to work up to sixteen hours each week on homework and general overview of topics covered (spread this time out throughout the week). This is considered the norm for a college level course. Quizzes will have similar problems found on the homework assignments. There may also be quizzes assigned through MLM, which will be worked outside of class. Your performance on quizzes and exams will be directly related to the amount of effort you put into your homework assignments.

Exam Policy: All exams will be given as scheduled. Notes will *not* be allowed on exams. Only the TI-30XIIS calculator is permitted during quizzes and exams. The use of graphing calculators, cell phones and other technologies on exams or quizzes is prohibited. Once the exam has started, no student may leave the classroom for *any* reason, unless the student turns in the exam or quiz for grading.

Calculator Use: Students can only use the TI-30XIIS calculator for most courses, any graphing calculator is not permitted. Please be aware that supporting work for any of the processes will be required to earn any credit on exams. Answers without correct supporting work may not earn any credit. Remember, the use of a calculator should enhance the mathematics, not replace it. The process of obtaining a solution is many times more important for our purposes than the solution itself. I will grade your work as well as your solutions.

– other policies and statements –

Makeup Policy: There will be no make ups on exams or quizzes. I may drop a few of the quizzes, depending on the number given. I will replace your lowest exam score (or a missed exam) with your final exam percent score.

Participation Policy: Participation is expected, and lack of participation will invariably prove detrimental to your grade and your learning experience. Regardless of the reason for missing class, you will be responsible for any missed assignments, material and announcements. Do NOT wait until the last minute to complete assignments.

Non-Participation/Census Date Policy: Students who do not meaningfully participate in the course by the state-mandated census date may be assigned a grade of *NP (Non-Participation)* and withdrawn from the course. Students withdrawn for non-participation are *not eligible for reinstatement* and will receive an 80% refund in accordance with institutional policy.

To be considered *participating* and avoid withdrawal, students must *attempt at least one graded activity* before the date NP grades open. An attempt is defined as submitting work that earns a *score greater than zero*. Graded activities include any assignment (HW, quiz, or exam) with a posted deadline (official or unofficial).

Red-Letter Days: All special dates related to this course can be found on the course outline and/or on myLab Math (exams dates, due dates on HWs or any MLM Quizzes, etc.). Dates related to NWACC policies (drop dates including Administrative, final week dates, etc.) can be found on the NWACC Calendar page. It is the responsibility of each student to know where to find these dates. Here is the NWACC Calendar link: https://www.nwacc.edu/enrollment/records/importantacademicdates.aspx.

Academic Dishonesty Policy: For equality purposes, your instructor reserves the right to clear your calculator of unapproved formulas and programs before each exam. No graphing calculators or calculators with a CAS (Computer Algebra System) such as TI-89, TI-92, TI-Voyage or comparable utility is allowed in this class. The attempted use of a prohibited calculator or program is academic dishonesty and will result in a score of 0 with no possibility of the score being dropped or replaced. This also applies to all other forms of academic dishonesty including, but not limited to, using formula sheets not provided by instructor or any notes, leaving the room and returning during an exam, copying from someone else's paper, or allowing someone to copy your paper. Further action will be taken according to the policy on Academic Honesty in the current College Catalog.

– more general policies –

Inclement Weather Policy: Decisions on college status during inclement weather are made by the President or the President's designee. Such decisions will be posted on the college web site, at http://www.nwacc.edu. The decision might be to move the class to Remote Streaming (details will be emailed at that time).

Artificial Intelligence Policy: Artificial Intelligence (AI) is a rapidly developing field that has many applications and implications for mathematics and education. AI tools can generate text, images, code, and other forms of content based on user input. Some examples of AI tools are OpenAI, Google Workspace, and Microsoft Bing (Copilot).

- The use of AI tools in this course is not prohibited in assisting you on HW Problems, to gain a better understanding of how the problem should be approached. You should use AI tools only as a study aid, not as a substitute for your own work or understanding. AI tools should never be used on quizzes, since you are testing your understanding in preparation for exams.

If you have any questions or concerns about the use of AI tools in this course, please contact me. I reserve the right to modify this policy at any time, and to take appropriate actions in case of any violations. By enrolling in this course, you agree to abide by this policy and the academic integrity policy and the student code of conduct.

Available Tutoring: Tutoring at the Math Center is offered. There is a link to the Math Center on my website with information on when the center is open. There are also many online sources (youTube, etc). Also, please, contact me during my office hours to get help or email me anytime.

Methods of Instruction: Instruction will take place through lectures, readings and completion of assigned problems.

Canvas Limitations: Just a reminder, we will NOT be using Canvas. No assignments will be posted to Canvas for this course. All course information will be emailed to your NWACC email account. The most up-to-date grades will in myLab Math (MLM). Grades will be moved to Canvas, but MLM will has the official grades.

Therefore, it is a good idea to check your NWACC Email often, several times per week. Daily is a good idea!!

Class Continuation Plan: NWACC reserves the right to enact a class continuation plan in the event of class cancellations due to weather or other emergency events. The instructor will maintain continuity using myLab Math, Canvas or other alternate means as determined by the instructor. You will be contacted via your established communications channels with instructions. Students will be expected to continue with assignments. Consideration may be given for exceptional circumstances.

If normal means to contact you is interrupted, check for notes on the course webpage.

Other Resources: Free tutoring is available at the Math Center (BH 1217). Other online resources, such as YouTube videos and many websites (use Google to find) can be useful. Also, don't forget to stop by during office hours.

Course Issues: Please contact me first with any questions or concerns with the class. If you have concerns about the class that you do not wish to discuss further with me, please contact the math department chair: Amber Holtz at (479) 986-4007 or aholtz@nwacc.edu.

NWACC General Policies Link: For additional college wide policies, go to the following website: https://nwacc.instructure.com/courses/854631/pages/syllabus-policies. You're also responsible for these policies.

Course Schedule: Below is a week-by-week breakdown of course coverage. Schedule is subject to change and, if that happens, email notice will be given.

Week	Days	Coverage
1 May 25 – 28	Monday	*Memorial Day, No Class*
	Tuesday	Course Intro, MLM Orientation, Prerequisite Problems 2.2 Definitions of Limits
	Wednesday	2.3 Techniques for Computing Limits 2.4 Infinite Limits 2.5 Limits at Infinity
	Thursday	2.6 Continuity 3.1 Introducing the Derivative
2 June 1 – 4	Monday	3.2 Working with the Derivative 3.3 Rules of Differentiation
	Tuesday	3.4 The Product and Quotient Rules
	Wednesday	*Exam #1 (Sections 2.2 – 3.4)*
	Thursday	3.5 Derivatives of Trigonometric Functions 3.6 Derivatives as Rates of Change
3 June 8 – 11	Monday	3.7 The Chain Rule
	Tuesday	3.8 Implicit Differentiation 3.9 Derivatives of Logarithmic and Exponential Functions
	Wednesday	3.10 Derivatives of Inverse Trigonometric Functions
	Thursday	3.11 Related Rates
4 June 15 – 18	Monday	*Exam #2 (Sections 3.5 – 3.11)*
	Tuesday	4.1 Maxima and Minima
	Wednesday	4.2 Mean Value Theorem
	Thursday	4.3 What Derivatives Tell Us
5 June 22 – 25	Monday	4.4 Graphing Functions
	Tuesday	4.5 Optimization Problems
	Wednesday	4.5 Optimization Problems
	Thursday	4.6 Linear Approximations and Differentials
6 June 29 – July 2	Monday	4.7 L'Hopital's Rules
	Tuesday	*Exam #3 (Sections 4.1 – 4.7)*
	Wednesday	4.9 Antiderivatives
	Thursday	4.9 Antiderivatives 5.1 Approximating Area under Curves
7 July 6 – 9	Monday	5.1 Approximating Area under Curves 5.2 Definite Integrals
	Tuesday	5.3 Fundamental Theorem of Calculus
	Wednesday	5.4 Working with Integrals
	Thursday	5.5 Substitution Rule
8 July 13 – 16	Monday	*Exam #4 (Sections 4.9 – 5.5)*
	Tuesday	*Catch Up*
	Wednesday	*Review for Final Exam*
	Thursday	*Final Exam*

Last Updated: May 21, 2026