



### PRE CALCULUS MATHEMATICS

*MATH 1034: 3 credit hours*

*Summer/2025,*

*June 30 – July 11: Monday – Thursday: 9:00 AM – 3:30 PM: Votey 207*

*July 12 – July 25: Monday – Thursday*

**TEAMS:** [MATH1034Z1 Pre-Calculus Mathematics \(202506-MK-Crosslisted\)](#)

*Instructress: Rosi, [jrosebus@uvm.edu](mailto:jrosebus@uvm.edu)*

*Office hours: Tuesday, 9:00 AM EST – 10:00 AM EST & Thursday, 5:00 PM EST – 6:00 PM EST (I will hold my Thursday, July 4<sup>th</sup>, office hour on Wednesday, July 3<sup>rd</sup>, instead of on Thursday, July 4<sup>th</sup>. That hour will be from 5:00 PM EST until 6:00 PM EST. Thanks!)*

**TEAMS:** [Rosi's Summer 2025 Office Hours](#)

*If you need help, please ask! If you wish to meet with me other than during my office hours, please email me days and times that are convenient for you to meet. I would be happy to make an appointment with you!*

*Prerequisite: Two years of secondary school algebra; one year of secondary school geometry.*

*Fulfills Quantitative Reasoning General Education requirement!*

### Quantitative Reasoning Proficiencies

*Interpreting data represented in a variety of ways, such as graphs, tables, and charts*

*Solving problems through the use of patterns, numbers, and symbols*

*Evaluating the value and validity of provided information*

*Determining if the solution to a problem makes logical sense in the real world*

*Formulating alternative solutions*

*Communicating effectively the thought process used to interpret and solve the problem*

### Learning Objectives

MATH 1034 covers skills necessary for success in calculus! We will review exponents, including negative and rational; factoring; solving equations, linear and quadratic; logarithms; right triangles; trigonometric functions; trigonometric identities; trigonometric equations; and non- right triangle trigonometry.

‘Angles’
‘Definition of the Trigonometric Functions Using Right Triangles’
‘The Coordinate Plane: Lines and Circles’
‘Analysis of Right Triangles’
‘Extending the Trigonometric Functions: The Unit Circle’
‘Linear Inequalities’
‘Nonlinear Inequalities’
‘The Basics of Functions’
‘Average Rates of Change’
‘Graphs and Rates of Change’
‘Trigonometric Identities’
‘Limits and End Behavior of Graphs’
‘Sum and Difference Formulas’
‘New Functions from Old’
‘Inverse Functions’
‘Transformations of Graphs’
‘Double-Angle and Half-Angle Formulas’
‘Linear Functions: Constant Rate of Change’
‘Exponential Functions: Constant Proportional Change’
‘Inverse Trigonometric Functions’
‘Modeling with Exponential Functions’
‘Logarithms: Definition and Fundamental Properties’
‘Solving Trigonometric Equations’
‘Laws of Logarithms’
‘Solving Exponential and Logarithmic Equations’
‘Quadratic Functions’
‘Long Division and the Factor Theorem’
‘Zeros of Higher-Degree Polynomials’
‘Graphs of Polynomials’
‘Rational Functions’

*After completing this course, the student will be able to WORK comfortably with trigonometric functions and identities, APPLY them to applied exercises, USE formulas for exponential growth and decay, OPERATE with polynomial/rational/exponential/logarithmic functions, DECIPHER and SOLVE word problems, and COMMUNICATE mathematical concepts!*

### *Required Course Materials*

#### *PREPARATION FOR CALCULUS ACHIEVE*

*We do have a BRIGHTSPACE site.*

*You may rarely use a calculator!*

### *Attendance & Classroom Expectations*

*Do you require special accommodations? Please let me know by Thursday afternoon, July 3<sup>rd</sup>, 2025, at 4:00 PM. I would be happy to accommodate you!*

*You are expected to actively participate in this course. Perfect attendance, showing up a tad early to each class, and respecting your classmates may help your final grade in your favorite class. Comprenez-vous?*

### *Assessments*

- ☐ *I do expect you to do the in-class practice. This is your opportunity to practice the skills I am teaching you. It is a very reasonable amount. We will have quizzes, too. So, you want to keep up on the work. In each class, I will assign the homework due for the next class.*

*Make-up quizzes are not given. It is in your best interest to take every quiz, the Midterm, and the Final Examination. If you miss any of these, you earn a 0% for it. No make-up evaluations are given. No extensions are given.*

*Our cumulative midterm examination will be given during our last in-person class. You will have two hours to work on it. It will be administered from 1:30 PM until 3:30 PM on Thursday, July 11<sup>th</sup>.*

*Our cumulative final examination is scheduled for our last day, Thursday, July 25<sup>th</sup>. It is scheduled from 1:30 PM until 3:30 PM. You will have your camera on while you take this examination. You will email me all of your work and answers as a single PDF to [jrosebus@uvm.edu](mailto:jrosebus@uvm.edu).*

### Grading Criteria/Policies

*Final grade for the class is based upon:*

*Quiz Average: 40%,*

*Midterm: 30%,*

*and*

*Final Examination: 30%.*

*My grades follow:*

*A+: 97% – 100%,*

*A: 94% - 96%,*

*A-: 90% - 93%,*

*B+: 87% – 89%,*

*B: 84% - 86%,*

*B-: 80% - 83%,*

*C+: 77% – 79%,*

*C: 74% - 76%,*

*C-: 70% - 73%,*

*D+: 66% – 69%,*

*D: 64% - 66%,*

*D-: 60% - 63%, and*

*F: below 60%.*

### Course Evaluation

*All of you get to evaluate the course and me, too! These evaluations will be anonymous and confidential. I take to heart the information I receive from these. So, I appreciate your honesty. Thank you!*

### Statement about Academic Integrity

<https://www.uvm.edu/policies/student/acadintegrity.pdf>

### Alcohol and Cannabis Use

*Statement on Alcohol and Cannabis in the Academic Environment*

*I care about you. I truly do! I want to work with you to provide you the best experience possible. I take my commitment to you very seriously!*

*Now, I am going to include some wording handed down from above for you.*

*“You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain*

*information not only in the moment you may be using, but up to 48 hours or more afterwards.*

*In addition, alcohol and cannabis can:*

*Cause issues with attention, memory and concentration*

*Negatively impact the quality of how information is processed and ultimately stored*

*Affect sleep patterns, which interferes with long-term memory formation*

*It is my expectation that you will do everything you can to optimize your learning and to fully participate in this course.”*

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*Now, this is my wording again. You matter to me. If ever I can help you, please let me know. Thank you!*

#### *Statement on Students with Disabilities*

*“In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. A student's accommodation letter lists those accommodations that will not be implemented until the student meets with their faculty to create a plan. Contact SAS: A170 Living/Learning Center; (802) 656-7753; [access@uvm.edu](mailto:access@uvm.edu); or [www.uvm.edu/access](http://www.uvm.edu/access)”*

#### *Statement on Religious Holidays*

*“Students have the right to practice the religion of their choice. Each semester students should submit in writing to their instructors by the end of the second full week of classes their documented religious holiday schedule for the semester. An arrangement can then be made to make up the missed work.”*

