MATH 101: Algebra and Trigonometry for Calculus

Fall 2025 Section 600 3 credit hours/1 Carnegie unit

Instructor: Tom Polaski Course Time: MW 9:30 a.m.- 10:45 a.m.

Office: Course Location: Kinard 211

Office Phone: 803-323-4604 **Office Hours:** MW 2:00 p.m. – 3:30 p.m.

TF 10:00 a.m. – 11:00 a.m.

Email: polaskit@winthrop.edu Other times may be arranged by appointment.

MTC Hours: T 11:00 a.m. – 12:00 m.

R 10:00 a.m. – 12:00 m.

The instructor reserves the right to make modifications to this syllabus. Students will be notified in class and by email. This syllabus is available at the course Blackboard site.

Course Goals

This course will review and extend the algebraic and trigonometric skills needed for single variable calculus. Topics will include equations, graphs, polynomial and rational functions, exponential and logarithmic functions, and trigonometry.

Student Learning Objectives

Students in this course will

- develop algebraic skills necessary for success in calculus with an emphasis on focus on computational skills,
- develop the ability to use a variety of multi-step mathematical processes necessary for calculus,
- demonstrate competence with basic notations used in calculus,
- develop trigonometric skills necessary for the study of calculus, and
- develop an understanding of the connections between the concepts of the unit circle, right triangles, and trigonometric functions.

General Education

The course meets the Quantitative Skills requirement in the General Education program at Winthrop University.

Text, Materials and Learning Aids

- Required Text: Algebra and Trigonometry by Michael Sullivan, Twelfth Edition. This course is part of the bookstore's First Day program. The text will be delivered through this program and the homework assignments will be automatically integrated into Blackboard.
- A scientific calculator is required.
- A computer is required.
- Students are encouraged to use office hours as a way to receive extra help.
- The Mathematics Tutorial Center (MTC) is staffed by faculty and mathematics majors, open during the day and evening, and is free. The MTC is located in Bancroft 271 and offers drop-in tutoring services. No appointment is needed. The MTC will open on Tuesday, September 2. Additional information such as hours of operation will be available at https://www.winthrop.edu/mtc.
- Winthrop University's Academic Success Center (ASC) provides comprehensive free resources for all
 undergraduate students seeking to perform their best academically. The ASC offers a variety of
 personalized and structured resources that help students achieve academic excellence, including peer
 tutoring and academic coaching. In addition to services within the ASC, other campus services (e.g.,
 Writing Center, Language Learning Center, Library) are available. For more information, please visit the
 ASC website: https://www.winthrop.edu/asc/. You can also contact the ASC at 803-323-3929
 or success@winthrop.edu with any questions.

Homework Sets

On the class days listed on the course schedule, you will be assigned homework sets in MyLabMath to help you to understand the class material. Each set will be assigned at the close of class (10:45 a.m.) and will be due at the end of the class day shown on the course schedule. The sets will be graded in MyLabMath. At the end of the course your homework grades will be rescaled to a 200-point scale.

Tests and Grading

Three 100-point tests will be given along with a 200-point cumulative final exam. No make-up tests will be given unless prior arrangements have been made with the instructor. A point system will determine your final grade. There are 700 points possible: 200 from the homework sets, 300 from the tests, and 200 from the final examination. A grading scale for the homework is available on Blackboard. The grading scale for tests and the final examination will be determined after they are graded. The semester grading scale will be created by adding the grading scales. Your final letter grade will be computed using these scales. Pluses and minuses are awarded at the discretion of the instructor. Your final numerical grade will be computed by converting your letter grade using the scale provided by Rock Hill Schools.

Attendance Policy

The attendance policy follows that of Rock Hill Schools: missing any 3 days of class (excused or unexcused) will result in an FA grade for the high school course and an F grade for the college course. Students are responsible for material they may miss due to absence. Attendance is mandatory for those class sessions which include a test. If no prior arrangements are made with the instructor, a zero will be recorded for a test not taken due to absence. If you will not be in class, it is your responsibility to notify the instructor.

Equal Access to Education

Winthrop University is committed to providing access to education. If you have a condition which may adversely impact your ability to access academics and/or campus life, and you require specific accommodations to complete this course, contact the Office of Accessibility (OA) at 803-323-3290, or accessibility@winthrop.edu. Please obtain your official notice of accommodations from the Office of Accessibility as soon as possible.

Academic Integrity

Review the student code of conduct for university polices on academic misconduct. Academic misconduct will not be tolerated and will result in a failing grade on the assignment and/or in the course. The full handbook is available online at https://www.winthrop.edu/studentconduct/winthrop-university-student-handbook.aspx.

Electronic Devices

All electronic devices (including cell phones) other than a calculator should be in silent mode and kept in your book bag or purse throughout class time unless you are otherwise instructed. If you have educational, health, or physical reasons for such a device you must notify your instructor of this accommodation. A phone may not be used as a calculator during tests.

AI and Other Advanced Tools

There are many ways to get help with your homework assignments, both from within the MyLabMath platform and from the campus resources mentioned above. Many students are now using generative AI and other advanced tools with their homework. Students in this class are allowed to use such tools only to check their work and to get step-by-step help through homework exercises. You are cautioned that overreliance on these tools can negatively affect your understanding of the course material.

Statement Concerning Course Management

Any student enrolled in courses at Winthrop University regardless of modality is entitled access to all campus resources. These resources include, but are not limited to, admissions counseling, recreational facilities, and health, library, and academic services. Questions regarding access to these resources should be directed to the assigned academic advisor or Dual Enrollment Program personnel.

Future Courses

Students are required to receive a grade of C- or better in MATH101 to move on to MATH201. The course credit students earn in this course *may* be transferred to another college or university.

On Communicable Diseases

As socially responsible members of this community, everyone is expected to engage in daily health self-monitoring and to stay home from on-campus class, work, or activities if they begin experiencing any symptoms of serious communicable diseases.

Tentative Course Schedule

Date	Sections	Topics	Homework	Homework
144.0.407			Assigned	(Due 11:59 pm)
W 8/27	1.1	Linear Equations	1.1	
M 9/1		NO CLASS		
W 9/3	1.2,1.4	Quadratic Equations Radical Equations	1.2,1.4	1.1
M 9/8	1.5,1.6	Solving Inequalities	1.5,1.6	1.2,1.4
W 9/10	2.2	Graphs of Equations	2.2	1.5,1.6
M 9/15	2.3	Lines	2.3	2.2
W 9/17	3.1,3.2,3.3	Functions, their Graphs and Properties	3.1,3.2,3.3	2.3
M 9/22	3.4,3.5	Piecewise-Defined Functions Transformations of Functions	3.4,3.5	3.1,3.2,3.3
W 9/24	4.1	Review; Linear Functions		3.4,3.5
M 9/29		Test 1	4.1	Late HW 1.1-3.5
W 10/1	4.3	Quadratic Functions	4.3	4.1
M 10/6	5.1,5.2	Polynomial Functions	5.1,5.2	4.3
W 10/8		NO CLASS		
M 10/13		NO CLASS		
W 10/15	5.3,5.4	Rational Functions	5.3,5.4	5.1,5.2
M 10/20	6.1,6.2	Composite, One-to-One, and Inverse Functions	6.1,6.2	5.3,5.4
W 10/22	6.3,6.4	Exponential and Logarithmic Functions	6.3,6.4	6.1,6.2
M 10/27	6.5,6.6	Properties of Logarithmic Functions Logarithmic and Exponential Equations	6.5,6.6	6.3,6.4
W 10/29	7.1	Review; Angles and Arc Length		6.5,6.6
M 11/3		Test 2	7.1	Late HW 4.1-6.6
W 11/5	7.2	Right-Angle Trigonometry	7.2	7.1
M 11/10	7.3,7.4	Values of the Trigonometric Functions	7.3,7.4	7.2
W 11/12	7.5	The Unit Circle	7.5	7.3,7.4
M 11/17	7.6,7.7	Graphs of the Trigonometric Functions	7.6,7.7	7.5
W 11/19	8.1,8.2	The Inverse Trigonometric Functions	8.1,8.2	7.6,7.7
M 11/24	8.3,8.4	Trigonometric Equations Trigonometric Identities	8.3,8.4	8.1,8.2
W 11/26		NO CLASS		
M 12/1	8.5,8.6	Trigonometric Formulas	8.5,8.6	8.3,8.4
W 12/3		Review		8.5,8.6
M 12/8		Test 3		Late HW 7.1-8.6

Add:ThroughWithdrawal Date:W 10/29Drop:Through T 9/2SU Election/Recission Date:T 11/18

Fall Break: W 10/8 – T 10/14 **Final Examination Date & Time:** M 12/15 11:30 a.m. – 2:00 p.m.