

MATH 1510C - College Algebra with Co-requisite Support

Summer 2026 Syllabus, Section A01, CRN 31002,

Credit hours: 6

Instructor

Samuel Shannon

Professional Qualifications:

Master's, Mathematics, Youngstown State University

Bachelor's, Mathematics, Pennsylvania Western (Clarion) University

Bachelor's, Secondary Education Mathematics, Pennsylvania Western (Clarion) University

Lecturer

Email: sjshannon@ysu.edu

Office: Cafaro Hall 603, <https://ysu.webex.com/meet/sjshannon>

Office Phone: 330-941-1816

Preferred Contact Method: Email or cell (not Blackboard message)

Communication Expectations:

Students are expected to stay engaged with the Blackboard course as well as their email addresses, as these are platforms where course information is regularly communicated. In the case of potential late or missing work, grade concerns, general questions, etc., communicating is the responsibility of the student.

How to Refer to me:

Sam

Course Description

1510C. College Algebra with Co-requisite Support. This course is primarily intended to prepare STEM students (along with MATH 1511C) for MATH 1552, 1570 or 1571. Topics include real numbers, equations and inequalities, linear, quadratic, polynomial, exponential, and logarithmic functions, graphing techniques, systems of equations, and applications. It includes corequisite support for students requiring remediation in mathematics while studying college algebra. Emphasis will be placed on prerequisite skills needed for college algebra as well as just in time review through the use of appropriate technology. The course fulfills the general education requirements for mathematics. Prereq.: YSU Math Placement Level 20. 6 s.h.

Course Readings

Group	Title	Author	ISBN
Required	College Algebra and Trigonometry (2nd Edition)	Julie Miller & Donna Gerken with ALEKS 360	

Inclusive Access: This course is part of the Inclusive Access program; you should NOT purchase any course materials as they are part of your course registration. In the event you drop this course from your schedule on or prior to the last day of DROP/ADD period, your account will be fully refunded automatically.

Opt-out: By default, students are opted into the content. If the student decides at that time, they do not want their required course materials to be delivered in this program at the low cost offered, they have the option to OPT-OUT. We highly encourage students not to opt-out. If you choose to opt-out, you will be responsible for obtaining the appropriate course materials/textbook/connect at the full price.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
5/11	1.1, 1.3 1.4	Linear Equations and Rational Equations, Complex Numbers Quadratic Equations	Module 1 Module 2
5/18	1.5-1.6 1.7	Applications of Quadratic Equations, More Equations and Applications Linear, Compound, and Absolute Value Inequalities	Module 3 Module 4
5/25	2.4-2.5 2.1-2.2	Linear Equations in Two Variables and Linear Functions, Applications of Linear Equations and Modeling The Rectangular Coordinate System, Circles	Module 5 Module 6
6/1	2.3	Functions and Relations	Module 7 Unit 1 Exam
6/8	2.6 2.7	Transformations of Graphs Analyzing Graphs of Functions and Piecewise-Defined Functions	Module 8 Module 9
6/15	2.8 3.1-3.2	Algebra of Functions and Function Composition Quadratic Functions and Applications, Introduction to Polynomial Functions	Module 10 Module 11
6/22	3.3-3.4 3.5	Division of Polynomials and the Remainder and Factor Theorems, Zeros of Polynomials Introduction to Rational Functions	Module 12 Module 13
6/29	3.6	Graphs of Rational Functions	Module 14 Unit 2 Exam
7/6	4.1 4.2	Inverse Functions Exponential Functions	Module 15 Module 16
7/13	4.3-4.4	Logarithmic Functions, Properties of Logarithms	Module 17
7/20	4.5 4.6	Exponential and Logarithmic Equations and Applications Modeling with Exponential and Logarithmic Functions	Module 18 Module 19
7/27	9.1, 9.4	Systems of Linear Equations in Two Variables and Applications, Systems of Nonlinear Equations in Two Variables	Module 20 Unit 3 Exam
8/3	Final Exam Review/Catchup		
8/10			Final Exam

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.