



**Northglenn High School**  
 601 West 100<sup>th</sup> Place • Northglenn, CO 80260  
 Office: (720) 972-4600 • Fax: (720) 972-4739  
<http://www.northglennh.adams12.org>



<b>School Year</b>	2020-2021	<b>Teacher Name</b>	Sirena Shock
<b>Room/Office</b>	Room 237	<b>Website</b>	shockmath.weebly.com
<b>Phone</b>	Email is best	<b>Schoology</b>	V774-TFR4-WTTGF
<b>Email Address</b>	sirena.shock@adams12.org	<b>Access Code</b>	

<b>Course Name</b>	MAT 055: Algebraic Literacy	
<b>Course Description</b>	This course develops algebraic skills necessary for manipulating expressions and solving equations. Topics in the course include radicals, complex numbers, polynomials, factoring, rational expressions, quadratic equations, absolute value equations and inequalities, systems of linear equations, related applications, and math learning strategies. This course prepares students for MAT 121: College Algebra.	
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>❖ Students will demonstrate knowledge of and the ability to perform algebraic manipulations with radicals, complex numbers, polynomials, and rational expressions.</li> <li>❖ Students will demonstrate knowledge of and the ability to solve quadratic equations, absolute value equations and inequalities, and systems of linear equations.</li> <li>❖ Students will demonstrate the use of critical thinking skills to solve application problems.</li> </ul>	
<b>Unit of Study</b>	<b>Grade Level Expectations/Content Standards</b>	<b>Targeted Date of Assessment</b>
Unit 1	<ul style="list-style-type: none"> <li>❖ Solve rational expressions that simplify to linear equations.</li> <li>❖ Solve absolute value equations and inequalities that contain one absolute value expression.</li> <li>❖ Determine whether a relation is a function and find its domain and range.</li> <li>❖ Divide polynomials by binomials using long division.</li> <li>❖ Review linear equations in two variables.</li> <li>❖ Determine whether a system of equations is dependent, inconsistent, or consistent.</li> <li>❖ Solve 2 by 2 linear systems of equations by substitution, elimination (addition), and graphing.</li> <li>❖ Create and use graphs, tables, and equations to solve real-world application problems relating to quadratic equations and systems of equations.</li> </ul>	9/24/2020
Unit 2	<ul style="list-style-type: none"> <li>❖ Factor out the greatest common monomial factor.</li> <li>❖ Factor the difference of two squares.</li> <li>❖ Factor the difference and sum of two cubes.</li> <li>❖ Factor trinomials of the form <math>ax^2 + bx + c</math>.</li> <li>❖ Add, subtract, multiply, and divide rational expressions.</li> <li>❖ Determine the domain of rational expressions.</li> </ul>	10/23/2020
Unit 3	<ul style="list-style-type: none"> <li>❖ Write a radical expression in simplest form.</li> <li>❖ Determine the domain for radical expressions.</li> <li>❖ Write radical expressions as an expression with a rational exponent and vice versa.</li> <li>❖ Apply the properties of exponents to expressions with rational exponents.</li> <li>❖ Simplify radical expressions using rational exponents.</li> <li>❖ Add, subtract, multiply, and divide radical expressions using radical properties and/or rational exponents.</li> <li>❖ Rationalize denominators.</li> </ul>	11/20/2020
Unit 4	<ul style="list-style-type: none"> <li>❖ Determine the square roots of a negative number and simplify powers of <math>i</math>.</li> <li>❖ Add, subtract, multiply, and divide complex numbers in the form <math>a+bi</math>.</li> <li>❖ Solve quadratic equations by using the square root property, completing the square, and using the quadratic formula.</li> <li>❖ Use the discriminant to determine the types of solutions of a quadratic equation.</li> <li>❖ Solve equations that are reducible to quadratic equations.</li> <li>❖ Graph basic quadratic functions.</li> </ul>	12/11/2020

★ All targeted assessment dates are tentative and may change as needed pending remote vs. in-person learning.



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Grading Scale		Grade Percentages/Weights	
A	90-100	Formative* 20%	Summative* 80%
B	80-89		
C	70-79		
D	60-69	*Weekly progress grades are posted at <a href="https://ic.adams12.org/campus/portal/adams12.isp">https://ic.adams12.org/campus/portal/adams12.isp</a>	
F	59 or below		

### General Expectations

- Grades are based upon the demonstration of proficiency on units associated with a standard given during each formative or summative assessment. Formative grades in addition to summative unit assessments will be used to holistically determine your grade.
- **Summative: 80%** Summative measures of achievement are taken when unit mastery is expected. (i.e., unit tests, culmination of a project, embedded assessments, etc.)
- **Formative: 20%** Formative assessments measure the scaffolding skills and/or content embedded in the unit. Formative assessments are taken frequently, after a student has practiced a skill or become familiar with content. Examples of formative assessments include but are not limited to exit tickets, paragraphs, oral check for understanding, warm-ups, stages in a large project, etc.
- Assessments will be graded based on teacher/district/state rubrics.
- On group projects, students will receive a grade for individual work and a group grade.
- Grades are based on achievement of Content Standards and Grade Level Expectations.

### Class Expectations

**Missing or incomplete assignments/assessments:** Superintendent Policies 6280 Homework and 6281 Make-Up Work, will be followed for this course.

#### Additional Help:

- ❖ I will be available on Wednesdays from ### to give extra help. Please send me an email if you would like to set up a different time to meet and we can schedule an appointment. Once we return to in-person learning, I may need to adjust this.

#### Materials and Supplies Needed Daily

- ❖ While in Remote Learning: computer/chromebook, spiral notebook and pencil

#### Accommodations

A variety of teaching techniques are used to meet the diverse needs of students. I am available by phone or appointment to discuss concerns or needs of students with special needs.

#### Assessments Used To Evaluate Student Progress

Assignments, Activities, Observations, Participation, Quizzes, and Tests

#### Motivation Used

- ❖ A variety of activities, real-world contexts and individual and group work that engage and stimulate students to think about math are a part of this curriculum.
- ❖ Students are encouraged to be engaged and motivated in the completion of their assignments.

### Student Expectations

#### Expectations for Classroom Behavior

- ❖ Students will be engaged in class during the designated time frames. Meaning no extra tabs open. Students should be focused on what is being taught or the assignment they should be working on.
- ❖ During live videos, (Google Meet or Zoom),
  - Students will stay muted unless wanting to contribute to the lesson or ask/answer a question.
  - All live online sessions that include a lesson will be recorded and posted on Schoology.
  - Video may be turned on or off based on individual class norms.
- ❖ Students will use school appropriate language on any and all school related tasks. There will be no “abusive” language tolerated.
- ❖ Attendance will be taken for every class during the 1st ten minutes of class.