



Course Name	Math Analysis		
Prerequisite	CMIC 3		
Course Description	Math Analysis uses a rule of four balanced approach which incorporates algebraic, numerical, graphical, and verbal methods of representing problems. Students will be able to apply mathematical problem solving skills in an approach that stresses understanding of the problem, development of a mathematical model, solving the problem and interpreting the solution. The course focuses on twelve functions as well as applications to real data, algebraic sense, and geometric sense.		
Unit of Study	Content Standards Covered	Approximate Time Spent	Semester
<u>Essential Outcome 1</u> Students can solve and interpret linear equations and inequalities	Patterns, Functions and Algebraic Structures	Approx. three weeks	1 st Semester
<u>Essential Outcome 2</u> Students can solve and interpret Quadratic equations including applications problems involving projectile motion.	Patterns, Functions and Algebraic Structures	Approx. four weeks	1 st Semester
<u>Essential Outcome 3</u> Students can find the max height, time in the air and distance of a projectile Students can use given information about a projectile to create a set of parametric equations	Patterns, Functions and Algebraic Structures	Approx. three weeks	1 st Semester
<u>Essential Outcome 4</u> Students can write exponential equations given a starting value and a rate of change Students can compare data and discern whether the data is exponentially growing or decaying or linearly growing or decaying	Patterns, Functions and Algebraic Structures	Approx. four weeks	1 st Semester



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<p><u>Essential Outcome 1</u> Students can find the value an interest bearing investment Students can find the future value of an investment Students can find the present value of an investment</p>	<p>Patterns, Functions and Algebraic Structures</p>	<p>Approx. five weeks</p>	<p>2nd Semester</p>
<p><u>Essential Outcome 2</u> Students can find the 6 parts of a right triangle given only 3 parts.</p>	<p>Shape Dimension and Geometric Relationships</p>	<p>Approx. three weeks</p>	<p>2nd Semester</p>
<p><u>Essential Outcome 2</u> Students can find the 6 parts of a triangle using the law of sines Students can find the 6 parts of a triangle using the law of cosines</p>	<p>Shape Dimension and Geometric Relationships</p>	<p>Approx. three weeks</p>	<p>2nd Semester</p>
<p><u>Essential Outcome 3</u> Students can solve linear systems of equations for 2 variable equations Students can solve 3 variable equations algebraically Students can solve 4 or more variable equations using a calculator</p>	<p>Patterns, Functions and Algebraic Structures</p>	<p>Approx. three weeks</p>	<p>2nd Semester</p>
<p><u>Essential Outcome 4</u> Students can add, subtract, multiply by a scalar and multiply matrices</p>	<p>Patterns, Functions and Algebraic Structures</p>	<p>Approx. two weeks</p>	<p>2nd Semester</p>



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Assessment/Practice Proficiency Levels	
4	Advanced Understanding of the Standard
3	Meets the Standard
2	Approaches the Standard
1	Does not Meet the Standard

Course Grade Scale	
A	89.5 - 100
B	79.5 – 89.4
C	69.5 – 79.4
D	59.5 – 69.4
F	0 – 59.4

Grade Reporting Criteria	Weights	
	Semester 1	Semester 2
Patterns, Functions and Algebraic Structures	70%	50%
Data Analysis, Statistics and Probability	0%	0%
Shape Dimension and Geometric Relationships	0%	20%
Mathematics Communication	10%	10%
Procedural Fluency	10%	10%
Practice	10%	10%

Grades are based on achievement of Content Standards and Grade Level Expectations.
 *Weekly progress grades are posted at <https://ic.adasm12.org/campus/portal/adams12.isp>

General Expectations

- Grades are based upon the demonstration of proficiency on units associated within specific grade reporting criteria.
- Assessment: Assessments are a means to determine a student's mastery and understanding of information, skills, concepts, or processes.
- Practice: Practice includes opportunities for students to receive clear, specific, and timely feedback as they are developing knowledge and skills, prior to Assessments. Practice may be scored as satisfactory (S) Incomplete (I) , unsatisfactory (U) or Missing (M) .
- Assessments will be graded based on teacher/district/state rubrics.
- Procedural Fluency: Is a measurement of the basic skills necessary for success in this class.

Class Expectations

Missing or incomplete assignments/assessments for this course: Superintendent Policies 6280 Homework and 6281 Make-Up Work will be followed for this course. They state that it is the student's responsibility to request and obtain missing work. When a student has an excused absence, the student has the same number of days they were absent plus one day to make up assignments. Students who are unexcused may not be able to receive feedback from Practice prior to a required Assessment.