



Course Description

Mathematics III is an accelerated and more conceptual application of previous topics learned combined with new topics. Topics include probability and statistics, polynomial functions, rational functions, inverse functions, geometry, logarithms, and others.

State Testing

Students will take a state sponsored ACT in the spring of their junior year.

Course Materials

Please Bring:

- Notebook or loose paper in a binder and folder
- Pencils
- Calculator (TI-84) or (TI NSpire)

Format and Procedures

Pre-Assessment: Students can take a pre-assessment to potentially pass out of certain lessons, units, or the course based on their score.

Class meetings will be offered daily and bi-daily. There are two tracks:

- “Semester Track: will complete math III in one semester
- “Year long” track will complete math III in one academic year

There are 3 main categories for meeting the course requirements: assignments, quizzes, and tests. All much be fulfilled for the course to be completed. The purpose of these categories:

- Demonstrate Proficiency – Taking term tests on the concepts and objectives. These must be completed independently.
- Show Application and Understanding of concepts - Assignments and quizzes can be done alone or in a group, but each student must submit their own.

Course Requirements

Attached to this document is a recommended yearlong pacing guide. The purpose of the guide is to set a minimum progression pace for the student. Students are encouraged to work ahead of that guide, but need to at least keep pace with the schedule.

****Remember that all work submitted should be your own. You may give each other advice and help, but each of you is responsible for developing the knowledge and skills on your own. ****

Grading Procedures

The Salt Lake City School District, and my, grading scale is as follows:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
93%	90%	87%	83%	80%	77%	73%	70%	67%	63%	60%	<59%

Strive for at least an 80% on all assignments, especially on the assessments. Your grade for a term will be calculated when you finish the term of work. Please let me know when you finish the work so that I know to submit your grade.

YEARLONG PACING GUIDE

SEMESTER 1: **TERM 1**

Week 1	<input type="checkbox"/> Lesson & QUIZ: Using Normal Distributions <input type="checkbox"/> Lesson & QUIZ: Random Sampling
Week 2	<input type="checkbox"/> Lesson & QUIZ: Methods of Collecting Data <input type="checkbox"/> Lesson & QUIZ: Population Means and Margin of Error
Week 3	<input type="checkbox"/> Lesson & QUIZ: Population Proportions and Margin of Error <input type="checkbox"/> Lesson & QUIZ: Evaluating Reports Based on Data <input type="checkbox"/> Exam: Data Statistics
Week 4	<input type="checkbox"/> Lesson & QUIZ: Identify Ways to Rewrite Expressions <input type="checkbox"/> Lesson & QUIZ: Extending Polynomial Identities to the Complex Numbers
Week 5	<input type="checkbox"/> Lesson & QUIZ: Fundamental Theorem of Algebra <input type="checkbox"/> Lesson & QUIZ: Structure and Notation of Expressions
Week 6	<input type="checkbox"/> Lesson & QUIZ: Sum of a Geometric Series <input type="checkbox"/> Lesson & QUIZ: Add, Subtract, and Multiply Polynomials
Week 7	<input type="checkbox"/> EXAM: Introduction to Polynomials <input type="checkbox"/> Term 1 Post-Assessment
Week 8	<input type="checkbox"/> Lesson & QUIZ: The Remainder Theorem <input type="checkbox"/> Lesson & QUIZ: End Behavior
Week 9	<input type="checkbox"/> Lesson & QUIZ: Sketching Polynomials <input type="checkbox"/> Assignment: Sketching Polynomials <input type="checkbox"/> Lesson & QUIZ: Review and New - Graphing Functions

SEMESTER 1: **TERM 2**

Week 1	<input type="checkbox"/> Lesson & QUIZ: Binomial Expansion with Pascal's Triangle <input type="checkbox"/> EXAM: Polynomial Relationships
Week 2	<input type="checkbox"/> Lesson & QUIZ: Rational Expressions and Polynomial Division <input type="checkbox"/> Lesson & QUIZ: Operations with Rational Expressions
Week 3	<input type="checkbox"/> Lesson & QUIZ: Solving Rational Equations <input type="checkbox"/> Lesson & QUIZ: Solving Radical Equations
Week 4	<input type="checkbox"/> Lesson & QUIZ: Simultaneous Equations <input type="checkbox"/> EXAM: Rational and Radical Relationships
Week 5	<input type="checkbox"/> Lesson & QUIZ: Area of a Triangle <input type="checkbox"/> Lesson & QUIZ: Law of Sines
Week 6	<input type="checkbox"/> Lesson & QUIZ: Law of Cosines <input type="checkbox"/> Lesson & QUIZ: Application of Area, Sine and Cosine Law
Week 7	<input type="checkbox"/> Lesson & QUIZ: Degrees, Radians, and The Unit Circle <input type="checkbox"/> Lesson & QUIZ: Special Right Triangles in The Unit Circle
Week 8	<input type="checkbox"/> Lesson & QUIZ: Modeling with Trigonometric Functions <input type="checkbox"/> EXAM: Trigonometry
Week 9	<input type="checkbox"/> Term 2 Post-Assessment

SEMESTER 2: **TERM 3**

Week 1	<input type="checkbox"/> Lesson: Constructing Equations <input type="checkbox"/> Assignment: Write Your Own Radical Equation Problem <input type="checkbox"/> Lesson & QUIZ: Problem Solving – Creating a Quadratic
Week 2	<input type="checkbox"/> Lesson & QUIZ: Realistic Domains and Ranges - Models <input type="checkbox"/> Lesson & QUIZ: Domain Restrictions
Week 3	<input type="checkbox"/> EXAM: Mathematical Modeling 1 <input type="checkbox"/> Lesson & QUIZ: Solving Multi-Step Equations and Isolating Variables
Week 4	<input type="checkbox"/> Lesson & QUIZ: Key Features of Rationals and Sketching <input type="checkbox"/> Assignment: Sketching Rational Equations
Week 5	<input type="checkbox"/> Lesson & QUIZ: Domain and Range <input type="checkbox"/> Lesson & QUIZ: Average Rate of Change
Week 6	<input type="checkbox"/> EXAM: Mathematical Modeling 2 <input type="checkbox"/> Lesson & QUIZ: Review and New – Graphing Functions
Week 7	<input type="checkbox"/> Lesson & QUIZ: Introduction to Trigonometric Graphs <input type="checkbox"/> Lesson & QUIZ: Transformations with Trigonometric Graphs
Week 8	<input type="checkbox"/> Lesson & QUIZ: Comparing Equations <input type="checkbox"/> EXAM: Mathematical Modeling 3
Week 9	<input type="checkbox"/> Term 3 Post-Assessment

SEMESTER 2: **TERM 4**

Week 1	<input type="checkbox"/> Lesson & QUIZ: Compound Interest
Week 2	<input type="checkbox"/> Lesson & QUIZ: Review Transformations <input type="checkbox"/> Lesson & QUIZ: Even and Odd Functions (Symmetry)
Week 3	<input type="checkbox"/> Lesson & QUIZ: Composite Functions
Week 4	<input type="checkbox"/> Lesson & Assignment: Which Increases Faster?
Week 5	<input type="checkbox"/> EXAM: Modeling with Functions <input type="checkbox"/> Lesson & QUIZ: Laws of Logarithms
Week 6	<input type="checkbox"/> Lesson & QUIZ: Solving Logs
Week 7	<input type="checkbox"/> Lesson & QUIZ: Find Inverse Functions <input type="checkbox"/> Lesson & QUIZ: 2D and 3D Shapes
Week 8	<input type="checkbox"/> Lesson & QUIZ: Modeling with Geometry <input type="checkbox"/> EXAM: Modeling with Logs and Geometry
Week 9	<input type="checkbox"/> Term 4 Post-Assessment

****PLEASE DETATCH AND RETURN TO MRS. MERRILL****

By signing below, I verify that I have received Mrs. Merrill's disclosure statement for Math III and agree and understand all expectations.

STUDENT:

_____ x _____
print name signature

PARENT/GUARDIAN:

_____ x _____
print name signature