A cartoon of a viking

Description automatically generated**NORTHWEST COLLEGIATE AND TECHNICAL ACADEMY**

**MARICRIS SATUR – MATH I TEACHER**

**Room 1002**

**saturm@nw.halifax.k12.nc.us**

## Math I Syllabus

**Course Description:**

NC Math 1 provides students the opportunity to study concepts of algebra with respect to linear, quadratic, and exponential functions. Students will also study analytic and Euclidean geometry with the focus on coordinate geometry. Students will explore statistics and probability with a focus on univariate and bivariate data. These concepts include expressions in the real number system, creating and reasoning with equations and inequalities, interpreting and building simple functions, expressing geometric properties, and interpreting categorical and quantitative data. They will use technology to problem-solve including the TI 84 graphing calculator and the Desmos calculator online.

The goal of this course is to prepare students for success in college, build upon mastered algebra concepts, develop problem solving skills, and understand practical application of Math in our everyday lives.

At the end of the course, students will be required to take the [Math 1 End-of-Course Exam](https://www.dpi.nc.gov/districts-schools/testing-and-school-accountability/state-tests/end-course-eoc).

# Student Learning Outcomes

Students will

* Construct expressions, equations, and inequalities from a given context and determine the appropriateness of the solution(s).
* Identify, create, and graph linear equations and their key features.
* Distinguish key features of a function given multiple representations.
* Determine the explicit and recursive formula for given arithmetic sequences.
* Understand and compare the key features of linear functions.
* Assess the line of best fit for a given set of data by using the correlation coefficient, residuals, and least squares regression line.
* Evaluate, create, and interpret exponential functions in context
* Identify situations and practical domains for exponential functions.
* Identify situations and practical domains for exponential functions.
* Identify situations and practical domains for exponential functions.
* Understand the terms and properties of polynomials.
* Understand how the values of a, b, and c in the quadratic expression affect the key features of the function to include: the direction of opening, steepness, maximum, minimum, y-intercept, axis of symmetry, end behavior and placement on the graph.
* Understand how to factor and solve quadratics.
* Understand how to factor and solve quadratics.
* Create, solve, and interpret systems of equations in context.

**Required Materials:**

* 1 Composition Notebook
* 3-ring Binder
  + Anything returned to you (like reviews and study materials) should immediately be hole- punched (if it isn’t already) and should be placed in the binder. NOTHING I have returned to you should go in the trash.
* Loose leaf paper
* Pens – BLUE OR BLACK INK ONLY - NO RED!
* Pencil – used on various occasions - Class notes can be written in pencil if you prefer.
* Highlighters of various colors
* Post It Notes

**Work Expectations:**

School is a professional environment. Students are expected to always conduct themselves in a respectful and courteous way. Students are expected to work on do now, take notes, complete assignments, and ask/answer questions, and keep their notebooks organized. Do now, notes, and any other assignment will be checked at the end of every unit or at the end of the week for a grade! You must take responsibility for your own academic progress and success. Take every opportunity to learn as much as you can.

**Classroom Basics/Rules:**

1. **Cell phones** must be in silent mode or turned off and out of sight(placed in designated pocket/holder) for the class period (unless the teacher asks you to use it for class). Every member of our classroom community is accountable to keep devices for non-academic use away.

**Note:** See the Student Handbook for the Cell Phone Policy.

1. **Bathroom**: Students will use facilities as their bodies need by asking the teacher, but use of bathroom will not be abused.
2. **Food/Drink – food and/or drink is not allowed in the classroom. Food and/or drinks must be consumed outside of this classroom. NO EXCEPTIONS.**
3. **Language**: It is my expectation that respectful and kind words will be used in this classroom. ***Accountability to the negative language choices you make are non-negotiable.***
4. **Be respectful.** Rudeness, disrespect, sleeping, and bullying will not be tolerated in our classroom. Remember to show respect for yourself and others in our classroom.
5. **Be prompt.** You must be in your seat and working on your do now when the bell rings.
6. **Be prepared to learn EVERYDAY.** You must come to class with your notebook, a pencil, paper, and homework.

**Consequences** **Academic Grading Policy**:

1. Be accountable for all your actions. **Assessments** - **55%**

* 1st offense -Verbal Warning (Tests, Projects, and Quizzes)
* 2nd offense - Student Conference/ **Classwork** - **35%**
* 3rd offence - Parental Contact Bell Ringer Activities
* Repeat offenders will receive an office Guided and Independent Work

rferral Note-taking

Skill Based Exercises

\*\*Severe behaviors DO NOT warrant warnings and **Homework** - **10%**

will result in an immediate referral to the office. Practice

These behaviors include but are not limited to blatant

disrespect or defiance, injury to another student,

outright vandalism, harassment, etc.

**Make-Up Work**: If a student has an excused absence, he/she will have 5 days to turn in any missing assignment. If a student misses a test or a quiz, he/she should consult with the teacher to agree on a time to make it up that is mutually convenient.

**Homework**: Homework will be assigned nightly on that day’s material. Assignments will be reviewed in class. The student must bring the completed assignment to class to receive credit.