**NC Math 1 Honors**

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**COURSE DESCRIPTION**

The purpose of this course is to build on the mathematics that students learned in the middle grades and prepare them for upper level mathematics courses. Additionally, the purpose of this course is to use mathematics to develop and strengthen problem solving skills that can be used beyond the classroom and outside the subject of mathematics. Students will continue to create and solve equations and inequalities, as well as interpret and reason with equations and inequalities. Students will work to understand the concept of functions and how to interpret functions. Students will work with linear, quadratic, and exponential models to solve problems. Students will prove simple geometric theorems algebraically, specifically working in the coordinate plane. Students will also continue in their study of statistics and probability by summarizing, representing, and interpreting data.

Clover Garden is a college preparatory school, and all Clover Garden Math 1 classes are taught at the Honors level. Honors courses offer the same curriculum as regular courses but are adapted for high achieving students. This means the class is more challenging academically than a standard Math 1 class. Honors courses are also weighted an additional point on your transcript. Refer to the student handbook for more information on weighted grading. Remember that beginning in 9th grade, course grades will be recorded on student high school transcripts. Colleges and universities will request this transcript when students apply to attend.

**MATERIALS and RESOURCES**

**Resources**

*Walch North Carolina Integrated Math 1 -* 2017

**Calculators**

A TI-83 Plus or TI-84 Plus graphing calculator and batteries are required.

**Classroom materials**

Students are required to bring the following materials to the classroom every day: math binder, pencil and pen, composition notebook, calculator with spare batteries, graph paper, and notebook paper.

**EXPECTATIONS**

The following expectations and procedures will always apply.

* Be respectful of others in the classroom.
* No food or drink in the classroom. This is a school rule and will be enforced.
* All electronic devices must be turned off and stored in a book bag in a designated area of the classroom. If a student is found using an electronic device at inappropriate times, it will be confiscated and the school policy will apply. There will be times when cell phones may be used in a classroom activity. During those activities, the cell phone may not be used to access applications unrelated to the classroom activity.
* Be on time to class. Tardies will be recorded and the school policy will apply.

**GRADING POLICY**

Students will be expected to complete all assignments on time. Each assignment will be placed into one of three categories, Tests/Quizzes, Classwork, and Homework. The final grade for each quarter will be based on the following scale:

Tests/Quizzes 42%

Classwork 42%

Homework 16%

The final exam for this course is a North Carolina End-of-Course Test. The test consists of calculator inactive and active items. One-fifth of the test is manual entry and the remainder is multiple choice. The final grade in the course will be an average of the four term grades (75%) and the student’s final exam grade (25%).

Tests are announced and are worth 100 points each. Quizzes may be unannounced and are worth 50 points each. Weekly speed quizzes (50 problems in 2 minutes) are an important part of your grade. There are practice quizzes on my website, and students should be practicing those daily.

**Extra Help**

Extra help is recommended after absences or if you are struggling. Extra help is available before school and is available only to students who participate fully in class. See my website “Class Info” page for dates when I will not have morning tutoring due to supervision duties.

**Late Work Policy**

Late homework will not be accepted. If the absence is excused, school policy will apply.

**COURSE PACING AND STANDARDS**

Given the amount of material we must cover, we will not be able to waste any time in our classes. The pacing is tentative and may be adjusted throughout the year.

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| **Unit Title** | **Pacing** |  |
| Prerequisite Skills Review | 15 days |  |
| Unit 1: Intro to Functions and Equations | 16 days | NC.M1.A-SSE.1a, A-REI.1,3,12, A-CED.1,4, F-IF.1,2,4 |
| Unit 2: Linear Functions | 25 days | NC.M1.A-SSE.1a,b, A-CED.1,2, F-IF.3,5,6,7,9, F-BF.1a,2, F-LE.1,5, A-REI.10, G-GPE.4,5,6, A-REI.1, S-ID.6,7,8,9 |
| Unit 3: Coordinate Geometry and Linear Systems | 20 days | NC.M1.A-CED.3, A.REI.5,6,11,12 |
| Unit 4: Exponential Functions | 23 days | NC.M1.N-RN.2, F-IF.2,3,4,5,6,9, F-BF.1,2, A-CED.1,2, A-REI.10,11, F-LE.5, S-ID.6c |
| Unit 5: Polynomial Operations and Quadratic Functions | 25 days | NC.M1.A-APR.1,3, N-RN.2, A-SSE.1ab, 3, F-IF. 2,4,5,6,7,9, A-REI.1,4,10,11, A-CED.1,2, F-BF.1b, S-ID.8 |
| Unit 6: Statistics | 15 days | NC.M1.S-ID.1,2,3 |
| EOC Review, Benchmark and State Testing, End of Year Activities, Flex | 31 days |  |

**CLOVER GARDEN SCHOOL’S MISSION, VISION, AND BELIEF STATEMENTS**

**Mission Statement**

Clover Garden School will foster community, generate enthusiasm, challenge students academically, and produce successful citizens.

**Vision Statement**

The vision for Clover Garden School is to create a community of empowered learners in an atmosphere of mutual respect, responsibility, and trust. Every student will be inspired and challenged to learn, grow, and accomplish academic, social, and career goals.

**Belief Statement**

We, the faculty and staff of Clover Garden School, believe in respecting ourselves and others. With the help of God and family, we strive to demonstrate unconditional love, integrity, faith, and honesty in all we do. We will maintain high academic standards equipping students with the necessary tools to become life-long learners, responsible citizens, and productive community members.

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| NC Math IBy the end of the year, the student should be able to: |
| * Apply the properties of exponents to include rational exponents.
* Interpret the structure of expressions (terms, factors, coefficients) and use the structure of an expression to find ways to rewrite into equivalent forms to solve problems.
* Add, subtract, multiply, and divide polynomials.
* Create equations and inequalities in two or more variables that describe numbers or relationships, and rearrange formulas to highlight a quantity of interest.
* Represent and solve equations and systems of equations algebraically and graphically. Represent and solve inequalities graphically.
* Understand solving equations and inequalities as a process of reasoning and explain the reasoning.
* Understand the concept of a function and use function notation.
* Interpret and analyze linear, exponential, and quadratic functions in terms of the context.
* Build a function that models a relationship between two quantities, and build new functions from existing functions.
* Use coordinates to prove simple geometric theorems algebraically, including slope criteria for parallel and perpendicular lines, the midpoint of a segment, perimeters of polygons, and areas of triangles and rectangles.
* Represent data with plots on the real number line, and use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets, and account for possible effects of outliers.
* Summarize, represent, and interpret data in histograms, box plots, and scatter plots.
* Compute and interpret linear models and the correlation coefficient.
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**Parents**: I have filled out the Parent Contact Info Form online at [cgsbaxter.weebly.com](file:///C%3A%5CUsers%5Crebekahbaxter.CGS%5CDocuments%5C2016-2017%5Ccgsbaxter.weebly.com). Yes \_\_\_ No \_\_\_

**Parents and Students**: I have read and understand the expectations for this course.

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Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Name (Print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Note: After obtaining signatures, this document will be copied and returned to the student for reference. The entire document is available at cgsbaxter.weebly.com.*