

## MONTE VISTA CHRISTIAN SCHOOL

### Math 1320, Algebra 1

#### Course Syllabus

#### Course Description

An introduction to the language and skills necessary for higher mathematics. Symbolic reasoning and calculations with symbols are central in algebra. Through the study of algebra, a student develops an understanding of the symbolic language of mathematics and the sciences. In addition, algebraic skills and concepts are developed and used in a wide variety of problem-solving situations. This course emphasizes the student's skills in dealing with linear, quadratic, and rational equations.

#### Curricular Mapping

Building upon the student's knowledge involving working with real numbers and solving elementary algebraic equations, this class extends those skills to include more complex and abstract situations. The problem-solving strategies and skills from Algebra 1 form the foundation that will allow the student to be successful in future math and science courses.

#### Course Objectives

Upon the successful completion of this course the student will be able to:

1. Solve equations with one variable
2. Represent linear relationships as graphs, equations, tables, or verbal descriptions
3. Find solutions to a linear system of equations with 2 variables
4. Graph and factor quadratic equations and solves quadratic equations by factoring and completing the square
5. Use the basic laws of exponents to simplify expressions including expressions with square roots
6. Categorize relations as linear or non-linear by examining the rate of change
7. Interpret information presented in graphs.

#### Text

*HMH Fuse: Algebra I, Common Core Edition* for the iPad

#### Algebra I Text Instructions:

Before downloading, purchasing, and registering the iPad text app, it's important to follow these instructions closely. If not, you might install and purchase the incorrect text, or have difficulty downloading the content.

1. Use the same iTunes account throughout the process of downloading, purchasing, and registering the iPad Textbook.
2. Download the App called HMH Fuse: Algebra I, Common Core from the App Store, on the iPad. It is free. It comes with one free chapter. There are 2 identical looking Apps – the only difference is that one is aligned to the Common Core Standards. It will have a “CC” in the name. Choose this one.
3. The other chapters are an in-App purchase, for a total of \$19.99. You purchase the App when you download Chapter 1.
4. You will need to purchase the App using the iTunes account that was used to download the App.
5. You will be prompted to register the App. You MUST register it using the same iTunes account that was used to purchase the App.
6. Follow your teacher’s instructions on which chapters to download, once you’ve made the in-App purchase.
7. **Warning:** this text takes up lots of memory.

Course Outline

Chapter 1: Equations

Chapter 2: Inequalities

Chapter 3: Function Concepts

Chapter 4: Linear Functions

Chapter 5: Systems of Equations and Inequalities

Chapter 6: Exponents and Polynomials

Chapter 7: Factoring Polynomials and Rational Expressions

Chapter 8: Quadratic Functions and Equations

Chapter 9: Exponential Functions

Grading:

<u>Grade Book Categories</u>		<u>Semester Weighted Grading Configuration</u>	
Classwork/Projects	15%	Quarter	40%
Homework Assignments	20%	Quarter	40%
Quizzes	25%	Final Exam	20%
Tests	40%		

Explanation of Grade Book Categories

Homework Expectations – Students on average should expect 20 – 30 minutes of homework per class meeting. Time spent on homework will vary from student to student.

Late Work Policy – Homework will be accepted one day late for up to 50%. Students will lose 10% per day for late projects/presentations.

### HS Grading Policy:

Please refer to the policy and procedures posted online in our *Parent/ Student Handbook*.

### Class Policies:

#### Attendance

Consistent attendance contributes to success in class. Students who are part of the learning process in class find the homework easier and understand the material better. Missing more than one class day usually requires some kind of tutoring for the student to catch up, so make every effort to come to class and actively participate while you are there.

#### Absences and Absent Work

Students who are absent are responsible for any material covered during class the day(s) they were gone as well as the dates assignments are due. Students will be given one day for each day they were absent to complete absent work.

Work that was due the day of the absence is to be turned in the first day the student returns. Assignments not turned in will result in a zero.

Notes are available on MOODLE. Assignments can be found on FOCUS in the Grade Book section. Students should either speak with or email the teacher if they have questions about notes/material they missed or will miss due to a scheduled absence.

Quizzes/Tests that need to be made up will be available to take with the teacher or in the ARC. Students will have one week to make them up from the day they return or set up a specific day to take them. If they are not taken by that date they will result in a zero and must be made up within two weeks from the original absence. Otherwise the grade will remain a zero. Exceptions can be made with special arrangements.

#### Tardiness

Students need to be in their assigned seat and have their materials ready to begin class when the bell rings. Materials include a pencil, math journal, homework, and pen ready to grade. A student who is not ready to begin class when the bell rings is subject to be marked tardy. Tardies are handled on a school-wide basis, so consult the *Student Handbook* for more details. If a student is more than 15 minutes late, he/she is marked absent for that period.

### Assignments

Assignments will be posted on FOCUS and in the classroom. In order to receive credit on an assignment, a student **MUST**:

- Attempt all of the assigned problems.
- Show all work in pencil.
- Include first and last name, date, period, and the assignment in the heading. One point will be taken off of assignments without this information.
- Graphing assignments must be done on graphs or graph paper and using a straight-edge tool or ruler. Minus points for graphing done on college ruled or blank paper.

### Quizzes and Tests

- Being absent one or two day(s) before a test/quiz does not excuse a student from taking that test/quiz along with the rest of the class. If a student is absent the day of a test/quiz, he/she will be expected to make up that test/quiz within a week from the day they return.
- If scientific calculators are allowed on a test or quiz day, then they may not be shared.
- Graphing calculators **are not** required and **are not** allowed on tests or quizzes.
- iPods and cell phones may **not** be used as a calculator.
- Talking during a test, not keeping answers or work covered, or looking at someone else's paper may result in a zero grade for that test or quiz. Anyone cheating or allowing other students to cheat will receive a zero on that assignment.

### School Policies and Expected Student Learning Results (ESLRs):

Students are subject to all academic policies of the school as found in the Parent-Student Handbook. Furthermore, it is each student's responsibility to read and follow all academic policies of Monte Vista Christian School. In addition to addressing each ESLR every year, we target a specific ESLR each academic year for particular focus.

### Tips for the Students

1. Take good notes.
2. Study your notes.
3. Participate.
4. Ask questions.
5. See your teacher during Flex for help.
6. Watch the videos on your iPad textbook.

Miscellaneous:

**Required Materials:** Every student is required to bring the following items to class each day.

- iPad with the digital textbook downloaded
- Math Notebook (must be a Mead style composition notebook preferably with graph paper rather than lined paper)
- Doceri or another screen-cast iPad App
- Colored pen for correcting homework
- Pencil (preferably mechanical)
- Binder paper
- Graph paper (for all graphs done on homework)
- Straight-edge or ruler during graphing units.
- Calculator: Please find a scientific calculator. (Students cannot use a graphing calculator or a calculator that solves equations) Below are a couple good options:
  - Texas Instruments TI-30XS MultiView
  - Texas Instruments TI-30Xiis

**iPad Applications:** Students will be downloading some free applications during the year. Any apps that cost money other than Notability, Keynote, and Pages will be optional for purchase.