

Algebra 1 (Foersters)



GENERAL DESCRIPTION

Algebra 1 is designed to prepare students for future success in Algebra 2, Precalculus, Physics, Geometry, and Calculus by continuing to develop the fundamental skills and principles covered last year in Algebra ½. This course will introduce and reinforce skills and concepts that will be used in future mathematical endeavors. Throughout the year, students will transition from concrete (known values) to the abstract (unknowns). The intent is to encourage students to become effective problem solvers and critical thinkers. The course is also designed to create students who are humble, teachable, and curious enough to become life-long learners.

COURSE REQUIREMENTS

1. Students should be respectful at all times towards their peers and tutor.
2. Students are expected to be in class on time, ready to start with all supplies and assignments.
3. Students should have homework prepared to turn in on time.
4. Students will participate in class through discussions, assigned classwork, and following tutor instruction.
5. A notebook should be kept by each student to organize notes, homework, and returned papers.

COURSE OBJECTIVES

- Continue learning to think critically
- Develop skills in mental math
- Develop basic use of calculator without creating unnecessary dependency
- Grow in the ability to use algebra to solve real world problems
- Grow in curiosity about mathematical/algebraic concepts

REQUIRED READING

- Paul A Foerster *Algebra 1: Expressions, Equations, and Applications*

SUPPLIES

Note to Parents & Students: also consult Grade Level Supply List.

- Pencil and eraser (no unerasable ink)
 - Red pen for grading
 - College-ruled, loose leaf notebook paper (no spiral notebooks)
 - Loose leaf graphing paper (no spiral notebooks)
 - 3-ring binder
 - Book cover
 - Ruler (US and metric markings)
 - Protractor & Compass (for home) - We will be covering measurements corresponding to angles and circles; therefore, a protractor and compass will be used. A set of protractors and compasses will be available for in-class use.
 - Calculator—either/or
 - Basic scientific calculator, such as the TI-30XIIS or its variants
- OR-

- Graphing calculator (not required for Algebra 1)—we strongly recommend a TI-84 Plus CE
 - The TI-84 or TI-84 Plus is also adequate for the class. The color features of the CE have been helpful for students, but they are not essential
 - We will provide class time instruction on how to use it
 - This calculator will be used regularly in Algebra 2 and Precalculus, so consider it a worthwhile investment!
 - If your family prefers another brand or model, you are free to choose it, but your student will not receive instructions on its use from his/her tutor

GRADING

Mastery (M) is achieved by obtaining an 85% overall percentage in the class. The relative value of the homework, quizzes and class participation is as follows:

- **Class contribution 20%**
- **Homework and pop quizzes 35%**
- **Tests 45%**

Students will have daily homework, as well as quizzes and tests to monitor mastery of the course objectives. The homework will be collected, graded, and returned promptly for appropriate revisions to be made. Revisions will be checked for correctness as well as completion.

If a student scores below 75% on a test, he/she is required to revise all missed problems and then retake a test (“revise and retake”) with comparable problems. If the student scores above 75% on the second test, then he/she will not be able to revise this test and the grade will stand. If the student again scores below 75%, he/she must repeat the process on a third test. The third test is NOT revisable. A student is not able to take any future tests until this process is completed. Students and parents should feel a strong sense of urgency any time they need to retake a test, as this process can slow down progression with the rest of the class. Since math is a highly sequential subject, MCA believes that this process is what will help students to build on a solid foundation as they progress through their education.

Contribution Grades

Contribution Grades primarily assesses four areas: a student’s preparation for class, his attitude towards learning, his contribution towards learning during class-time, and his level of engagement during the class conversation.

A student’s respectfulness towards God, his tutor, and peers is a prerequisite for a good Contribution Grade.

Daily Contribution grades will be given for every hour of class. Typically, students are expected to earn 10 points per hour, but the tutor may adjust these values to better reflect the nature of the class time. Daily Contribution grades are not revisable.

Additional Contribution Grades such as Engagement Notes, etc. may be assigned as needed. All additional Contribution Grades are revisable for 70% of the original value, unless the tutor specifies otherwise.

REVISIONS

Most assignments given are revisable, with the exception of occasional pop quizzes in class. Through revisions, a student can earn back 70% of the points lost on an assignment and may do revisions twice to regain all the possible points. However, students are strongly encouraged to maintain awareness of revision deadlines (given in syllabus), after which point revisions will not be accepted. Revisions are due by the end of the school day on the posted date. If an assignment is handed in late, the points deducted for being late are not revisable.

COMMUNICATION

At Midland Classical Academy, we promote an open-door environment between tutors, students, and parents. Students are encouraged to initiate contact with their tutors when they need help on a concept or just a listening ear. My office hours will be posted on my office door, and students are welcome to drop by or schedule an appointment. Parents are also encouraged to contact me in the same manner.

I will do my best to communicate with students and parents if the student's grade is below an 85%.

EXTRA CREDIT POLICY

Extra credit opportunities will be available throughout the school year, but most of them are assigned and only available for a limited time. Students are encouraged to take advantage of these opportunities as they come along, as there are very few available as the end of the school year approaches.

MCA Schoolwide Policies

MCA ATTENDANCE POLICY

Absence: Parents must inform the school if their student will be absent for any reason. Call the Front Office or email upperschoolnurse@mcaknights.org prior to the absence or on the morning of the absence. If a student is absent without prior notification by a parent, the school will call the parent to determine the validity of the absence. Call the office, 432-694-0995, or email upperschoolnurse@mcaknights.org.

In the event an Upper School student is absent for more than one-fourth (1/4) of the class sessions during a semester, the student's parents must meet with the tutor and Head Administrator to determine whether the student will receive credit for the class. Additional and/or make-up work may be required.

Tardy Policy: Tardies will be marked at the discretion of the individual tutors. Students or parents should contact the individual tutors to report reasons for tardies as soon as possible.

Missed Assignment Due Date Guidelines: In the event of an absence, a due date extension will be given. The extension will not exceed the number of school days missed during the absence. Due dates will be established by the class tutor. Students must complete all work assigned during their absence. However, the tutors may, at their discretion, excuse the students from any portion of the assignments missed. Students will receive full credit for submitting assigned work. Note: It is the **student's responsibility** to find out what work was assigned. In the case of extended illness, it is recommended that the student or parents contact the tutors directly to find out what assignments were or will be missed.

MCA HONESTY POLICY

All students are assumed to be exhibiting the godly fruit of self-control. We anticipate working with students who are characterized by joy, honesty, and diligence. For this reason, upon enrollment, we require that each student affirm that he or she will maintain the highest standards of honesty and behavior in all work done for Midland Classical Academy. All students will be asked to sign the following.

Pledge of Academic Honesty

I have read and understand the Midland Classical Academy Code of Conduct. I pledge my honor, with God as my witness, to commit myself to the practice and preservation of these standards of academic honesty as long as I am a student of the academy.

As such, the following actions are considered serious violations of our Honesty Policy.

1. Directly copying someone else's work visually, orally, electronically, or otherwise.
2. Use of disallowed devices on assignments such as notes, smartphones, books, etc.
3. Getting test questions or essential information from another student who has already completed an assignment that will later be taken, such as a test or quiz.
4. Any other activity that the tutor has explicitly described as cheating.

MCA MASTERY WITH HONORS (MH)

Midland Classical Academy offers honors credit, referred to as "Mastery with Honor", but we offer no "honors" classes.

Mastery with Honor credit for a class is given to those students who

- receive a minimum grade of 92.5 at the end of each semester
- receive a minimum participation grade of 85 at the end of each semester
- demonstrate character befitting an honor student (1 Corinthians 10:31)
- complete a tutor-approved, 20+ hour project that advances the student's knowledge or skills in the subject while serving either the school or the community in some capacity.

As a student fulfills these requirements in a class at MCA, they receive a Mastery with Honor designated by an "MH" for the class. Mastery with Honor applications and a nominal fee are due at the end of October. The projects themselves are due at the end of March with two scheduled checkpoints in between the application and final deadline.

ARTIFICIAL INTELLIGENCE (A.I.) POLICY

Artificial Intelligence programs are tools that can be used beneficially or harmfully. To the extent that MCA uses these A.I. tools, we desire to use them and instruct our students to use them beneficially. It requires the classical virtue of "Wisdom" to discern the difference between what is beneficial and what is harmful.

Among MCA's core values is "Engaging Minds". Everything we do, including our use of A.I. needs to be in harmony with this value and to cultivate within students the skill of being able to "think for themselves".

MCA offers the following principles for tutors & students to follow as they navigate A.I. in their academic domains. MCA tutors will create and clearly communicate their own instructions for A.I. usage in their classrooms and for their assignments. Students should practice integrity, honesty, and humility in their use of A.I. as in all their work.

Principle 1: Why to use A.I. - A.I. should only be used by a student to equip them to better understand the material and to learn in a way that facilitates their critical thinking skills.

Principle 2: When to use A.I. - Tutors will explicitly and clearly communicate which assignments a student may or may not use A.I. tools to assist in their learning.

Principle 3: How to use A.I. - Tutors will explicitly and clearly communicate the method in which it is acceptable and not acceptable for the student to use A.I. tools.