

Algebra with Career Applications

Morton High School



Algebra with Career Applications at a Glance

The purpose of Algebra with Career Applications is to bridge the gap between Informal Geometry and Algebra II-Standard. Algebra II, by its very nature, is a course in advanced Algebra. Algebra with Career Applications allows students to explore complex mathematical concepts at a pace that encourages success. Additionally, the course will include a variety of workplace skills and problem solving strategies aimed at supporting success in the workforce.

Topics Covered:

Functions, radicals and rational exponents, linear functions, exponential functions, quadratic functions, right triangle trigonometry, probability and statistics. Technology such as the TI-Nspire and Desmos will be used to enhance student learning.

Instructional Resources:

Math Medic, Delta Math

Available Resources

All blank notes, homework assignments, answers to homework, blank reviews and answers to reviews are available on Schoology.

Absences

Students need to take the initiative to find out what was missed in class after an absence. All completed written notes and homework solutions are available online each day. Please see the Schoology page before asking questions. Emails are much appreciated if there is confusion about notes, assignments or the student's absences leading up to an assessment. **Students who are absent the day before or day of a major assessment must email the instructors with a firm make-up date ASAP.**

Mathematical Practice Standards

All Morton High School Students will:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

Grading Procedures

A Total points system is used to calculate grades. Grades are determined by dividing an individual student's accumulated point total by the total number of points possible.

Tests:	50-60%
Quizzes/Projects	30-40%
Homework	Approx 10%

Homework will be assigned on most days and will be for student development of concepts taught in class. Students are expected to complete homework on their own and then be prepared to ask questions and discuss with their classmates/teacher on a daily basis. Homework assignments will be collected periodically to assess understanding. Formative assessments will be used to periodically to reflection on learning.

Extra Credit may be available at the teachers' discretion.. It will involve a project or selection of problems. As per department policy, the extra credit is worth 2% added to the semester grade percentage.

Quizzes and Tests are considered summative assessments. Retakes should not be expected.

Academic Assistance

First and foremost, students are expected to actively engage with class activities before requesting academic assistance outside of class time. Students who have the same HOMEROOM as the teacher may get a pass for additional assistance during that time.

Teachers are also available after school on most days. .

Students should ask for assistance via email (*preferred*) or during class. Emailing helps to make sure that your teacher is available and can give the appropriate assistance. We are always happy to work with students when they need assistance, **but students need to be proactive so that they can get help when they need it.**

Classroom Norms

Students will

- Use technology appropriately
- Place phone in bag or pocket (phone use prohibited)
- Remove earbuds (use is prohibited)
- Arrive to class on time
- Limit bathroom breaks to unexpected urgencies
- Work on assigned task
- Follow teacher directions

Students who do not meet the classroom norms may receive a referral.

Supplies Needed

- Notebook or Charged iPad for notes and/or homework
- Pencils
- TI- 30XS Multiview or TI-Nspire CX or CX II

Helpful Websites

PowerSchool is an excellent way to stay on top of your grades, tardies, and absences:

<https://ps1.morton709.org/public/home.html>

Schoology is where students AND parents access content, assignments, announcements and resources:

<http://mcusd709.schoology.com>

Student Expectations for Success

a. Students are expected to be active participants in the learning process. This includes participating in class discussions, thinking about questions posed by the teacher and by classmates, construct viable mathematical arguments, and to help create an atmosphere that is conducive to learning.

b. Students are expected to be responsible students. Responsible students are ready to learn throughout class by having required materials, being respectful of others and self, and being focused on mathematics. Students are also expected to complete assigned tasks (homework, class work, and other assignments), and seek extra help from the classroom teacher, as needed. Furthermore, responsible students will correct mistakes on homework and quizzes and will do their best to learn for understanding.

c. Students are expected to show knowledge of all course objectives and apply that knowledge to real world situations. Furthermore, retention of material beyond the unit assessments is necessary. Students are expected to apply previously learned mathematics to new content to strengthen their mathematical understanding. Students will be expected to apply algebraic, numerical, and graphical reasoning to solve problems and explain their reasoning to others.

Thank you and I look forward to working with you to not just do math problems, but learn how to write about math, improve your logic skills and become a better math student.

-The Mathematics Department

