

Dear Parent/Guardian of _____,

I am very happy to have the opportunity to work with your child this year. I am excited, and I know that this will be a great year. Please take some time to review the course description that follows.

If you would like to communicate and receive updates or progress reports, please include your contact info below:

Parent Email: _____

Student Email: _____

Parent Phone: _____ Is this a cell? _____ Is texting ok? _____

Student Phone: _____ Is this a cell? _____ Is texting ok? _____

If I have not already, I look forward to meeting with you some time during the year. Please feel free to contact me by phone or email for any reason.

Sincerely,

Susie Aames
The School of Arts and Enterprise

I have read the Business Algebra 1 course description and I understand what is expected in this class.

Student Signature _____ Date _____

Parent Signature _____ Date _____

Course Overview

This integrated Business Algebra I course will provide an engaging, contextualized learning environment for students to master the fundamental concepts of Algebra I through business applications. Students will develop an understanding of business, finance, and marketing while applying the mathematical knowledge necessary for success in those fields. This course provides a meaningful context for mastering the writing, solving, and graphing of linear, quadratic, and systems of two equations with multiple unknowns. This integrated approach provides an introduction to entrepreneurial ventures and basic business applications, such as break even and profitability analyses and revenue and cost functions. Assessment for this course will be based upon The School of Arts and Enterprises 21st Century Learning Goals, Common Core State Standards in Mathematics, Common Core Standards for Mathematical Practice, Common Core State Standards in English Language Development, and Common Core State Standards in English Language Arts.

Materials

Students will need to bring to class:

- Composition Notebook utilized as an Integrated Notebook used only for Business Algebra 1 class (students should have multiple because notebooks will fill up quickly).
- Binder or folder for handouts and returned papers (may be used for multiple classes)
- Day planner, agenda, or calendar
- Various colored pens to color code lessons
- (Optional) Various art supplies for projects involving drawing, coloring, cutting, and pasting

Textbook

- *Algebra McDougal Littell Algebra 1: Applications, Equations, & Graphs*
- Students may keep their textbook at home unless otherwise instructed.

Late Work Policy:

Late Work is discouraged, but accepted. The most important thing is that you do the work so you can learn the math. Remember, math is learned by doing. One cannot build a skill and improve without practice and effort.

Some assignments, especially projects, will be graded partly on promptness. While you may turn in the project late, you will not be able to earn full points

Quizzes, Tests, and Retest Policy:

For quizzes, you will be allowed to use your Interactive Notebooks (NB).

Tests must be taken without the use of your INB.

However, if you feel that you were not ready for a test or are not happy with your grade, you will have the opportunity to review the concepts on your own time and retest to improve your grade. Your test grades should be representative of what you know about a certain concept now, not what you knew about it on the original test date.

Students are encouraged to retest, but in order to do so a request to retest form must be completed. Remember, algebra concepts continually build on top of one another.

Tutoring

Dates to be determined

Student Expectations

The following behaviors are expected to be exhibited by all class participants:

- ✓ **Students must make every effort to learn.**
- ✓ **Students must not hinder other student's learning.**
- ✓ **Active participation is a requirement.** When there is something to do, do it.
- ✓ **Collaborate.** Work together to accomplish what you cannot accomplish alone.
- ✓ **Help each other.** Tutoring a classmate helps the school, and it helps you learn better, too!

Ms. Aames' Classroom Norms

- ✓ Electronics must be turned off when class starts
- ✓ Backpacks and unnecessary materials must be kept off the desks during class activities.
- ✓ Be in your seat early. Ms. Aames starts class on time.
- ✓ Ms. Aames ends class and dismisses the class, not the bell.

Cheating (a.k.a. copying, giving answers)

All parties involved will be given a zero and reported to administration.

Mastery Learning and Standards-based Grading

Mastery Learning is an instructional approach that is designed to help all students improve their learning. Some key aspects of mastery learning include:

- Learning objectives will be transparent from the first day of a unit and on each assignment.
- Students will have opportunities to track and reflect on their progress on the standards.
- Formative assessments (e.g., classwork, homework) are no longer included in academic grades because these assessments are opportunities for students to practice the standards.
- Summative assessments are the primary factor in academic grades.
- Multiple summative assessments that address various learning styles should be used.
- Behavior, attendance, participation, effort, and work habits are no longer included in academic grades.

Standards-based Grading

The SAE has adopted the Mastery Learning model of standards-based grading. This means that students are evaluated based on specific standards (things students need to know and be able to do), rather than on a point system. Students will no longer be given “points” towards their final grade for completing work or simply participating. A student must demonstrate their knowledge and abilities on a variety of different assessments (quizzes, oral, quizzes, discussions, tests, essays, reports, speeches, projects, presentations, portfolios) and all of the standards the students demonstrated in each assessment are evaluated separately on a 4-point rubric (4 or 3.5=Advanced, 3=Proficient, 2.5=Approaching Proficient, 2=Basic, 1.5 or 1=Below Basic). This allows students to easily see which concepts they understand and can put to use (Mastery of a standard) and on which concepts they need more practice and instruction.

For the purpose of Mastery Learning, it is important to recognize the difference between “summative” and “formative” assessments.

Formative Assessments are given during the instructional process and are usually less formal in nature: quizzes, oral quizzes, discussion responses, exit tickets, demonstrations. These tell a teacher how students are progressing toward the learning goals and help students understand and track their progress as well.

Summative Assessments are longer and more formal in nature: tests, presentations, essays, performances. These are given at the end of the unit and course to determine what a student knows and is able to do after the main instruction has concluded.

Common Misconceptions about Mastery Learning

Key aspects of mastery learning can sometimes be simplified to the point of not being correct. It is important to clearly explain the concept of mastery learning to students, and to reinforce the aspects of mastery learning consistently throughout the school year. Some examples of common misconceptions about mastery learning include:

- “Only tests count toward my grade.” – teachers will use multiple summative assessments (e.g., traditional tests, essays, reports, performance assessments, projects, oral examinations) to measure student proficiency.
- “I don’t need to do classwork or homework anymore because they don’t count toward my grade.” – teachers are still expected to assign and provide feedback (e.g., scores) on all formative assessments (e.g., classwork, homework) to provide students with feedback on their progress toward proficiency in the standards. These formative scores will be entered in the grade-book but will no longer count toward the final course mark once the summative assessment is given. Classwork and homework assignments should still be entered in gradebooks (but not count toward final grades) so parents and students can track their progress. Students who do not practice the standards (i.e., complete their formative assessments) will be much less likely to perform well on summative assessments.
- “I can turn in work late/I have as many chances as I want to re-try completing summative assessments.” – summative assessments are the primary measure of student proficiency levels. Students who do not turn in summative assessments will be assigned ‘incomplete’ for that assignment. ‘Incomplete’ assignments are equivalent to zeros and will be changed to ‘not proficient’ (failing) grades (with values of zero) at the end of a semester. Students who complete summative assessments but earn ‘not proficient’ grades should have at least one additional opportunity (after re-teaching) to demonstrate their proficiency in the standard. Teachers may set an appropriate time period (e.g., two weeks) for students to have additional opportunities to re-take summative assessments.
- “I don’t test well, so I won’t perform well under this system.” – students who have earned good grades in a traditional grading system have been rewarded for completing work rather than by demonstrating proficiency in the standards. Mastery learning focuses students on learning and demonstrating their proficiency in the standards. Students generally do not test well because they have been focused on completing work quickly rather than taking the time to learn the material.

Final Course Mark Grade Scale for Mastery Learning

Final grades are determined by the percent of standards that are mastered, not by the average grade of assignments completed. Because each assignment is evaluated using 4 points (possibly with .5 increments) the percentage scale for the final course mark then changes to more closely match that students must be proficient in at least some standards in order to be prepared to move to the next level of the course or to be college-ready (in other words, to receive a C). This is why the percentage value for a C or better begins at 55%. In order for a student to get an average of 55% or better across all the standards in the course, they must receive a 2.5 or 3 (Approaching Proficient or Proficient) on some of the standards. A student who is scoring only 2 out of 4 on all standards rubrics in the course is only at a Basic level, which means that they have not yet mastered enough of the skills or knowledge to move on to the next level of course work and/or be successful in college.

Final Course Mark Percentage Bands

A	85-100%
B	70-84%
C	55-69%
No Credit (Fail)	0-54%

The SAE does not allow a D to be used as a final course mark because we are a college preparatory school and a D is not an acceptable grade for college preparatory course work.

A Note on Quarterly Progress Reporting for Mastery Learning

Please note that in the Mastery Learning model, a student's grade shows the level of Mastery they have achieved on specific standards in that content area. It is NOT necessarily an indication of how hard a student is working or how well they behave in class. If a student is failing (below 55%) for the overall course at the quarter, please refer to the individual progress report or grade book entries from that teacher in the online portal to see which standards the student needs more practice or help with during tutoring. (If you have trouble accessing the online portal, please call The SAE main office for assistance.) Because the course is only half over at the quarter progress report, it is entirely appropriate that the student may not yet have a passing grade. Mastering knowledge and skills happens over time with many opportunities for application and practice. Students will have multiple opportunities to retake assessments and therefore show their mastery of skills and knowledge as the semester continues.

We know that this change is a major shift in traditional grading practices. However, this change was made because of research-based studies that show how this model hugely improves student success in high-school and preparation for college.

Course Units

Unit 0 – Pre Algebra Review

Unit 1 – Linear Equations and Inequalities: Students apply equations and inequalities to model and solve real-world problems in a business simulation. Given a fixed startup budget, students assess the viability of a retail business by creating, graphing, and interpreting the meaning of linear functions and intercepts.

Unit 2 – Systems of Equations and Inequalities: Modeling real world business situations using break even analyses, students will understand and manipulate systems of equations and inequalities. Students will use systems of equations to judge the viability of a variety of real-life business models. Students will create and interpret graphs of a system of linear inequalities to analyze marginal profit and loss.

Unit 3 – Exponents and Polynomials: Students use optimization of business rental space as the context for applying properties of exponents and to create and solve polynomial expressions.

Unit 4 – Quadratic Functions and Equations: Through creating and analyzing revenue, cost, and profit functions, students will interpret and solve quadratic equations using the four standard methods.

Unit 5 – Rational Functions and Equations: By examining the importance of employee productivity and its impact on business efficiency, students simplify rational expressions and use rational equations.