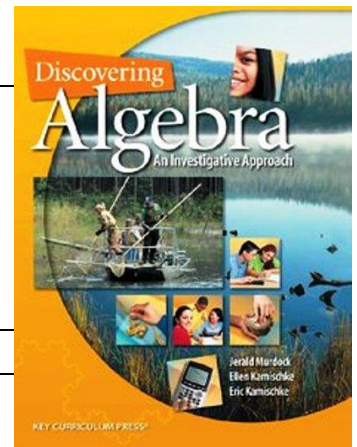


Algebra I - Syllabus



Instructor:	Ms. Zietlow	Mr. Booker
Room:	108	151
Email:	zietlomt@milwaukee.k12.wi.us	bookerl@milwaukee.k12.wi.us
Phone:	414-906-5058	414-906-5073
Student Support:	Wednesday, Thursday 2:45 – 3:25	Wednesday, Thursday 2:45 – 3:25
Remind:		
Google Classroom:	Go to Google Classroom. Click on “+” and “join class”. Add Algebra 1 and use the code below for your appropriate hour.	
	Hour 1 557vfbk	Hour 3 kwoj8uf
	Hour 5 jgsl0l	Hour 6 ahih8j4

Course Goals

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. The course is a balanced combination of procedure and understanding. Additionally, students will be taught mathematical practices which allow them to develop a mathematical mindset, see mathematics as sensible and worthwhile, and develop a sense of diligence with mathematical tasks.

Students will develop an understanding of Algebra that nurtures their differing strengths and talents, and at the same time helps them to develop various mathematical insights.

Students will develop mathematics from a modeling perspective to permit them to experience mathematics as a means of making sense of data and problems that occur in assorted contexts within and across cultures.

Structure

Throughout your studies of Algebra, you will be constructing mathematical knowledge by investigating mathematics in realistic settings. You will be learning by doing. Because the mathematics in this curriculum is based on realistic events, you will find

- there is often more than one solution or approach to a problem.
- yourself being asked to explain solutions and communicate about mathematics.
- yourself working collaboratively in small groups, often exploring problems through investigating.
- yourself using technology throughout your work in this course.

The school has a school-wide literacy initiative. To help you understand your reading material, we will be using the strategy of close reading with annotation. To help you communicate your math findings we will be using claims, supporting evidences, reasons, and explanations.

Course Expectations

It is expected that every student will contribute positively during class. It is expected that:

- Everyone will learn mathematics in this class.
- Mistakes are valuable and cause brains to grow.
- Questions are really important and will be encouraged.
- Math is about creativity and making sense.
- Math is about making connections and about communicating.
- Mathematical thinking is about depth and not speed.
- Math class is about learning, not performing.

The following supplies are needed for Algebra by **Monday, August 21st**.

- ✓ A spiral notebook **OR** binder with loose-leaf paper
- ✓ 1-2 folders
- ✓ Pencils and an eraser
- ✓ Earbuds or headphones
- ✓ A Graphing Calculator (see below)

In order to successfully participate in any of the mathematics courses at Riverside, **students will need to have their own graphing calculator**. Students will use their graphing calculator regularly in all high school math courses.

Scientific, four-function, or other non-graphing calculators are **NOT** acceptable.

Students are expected to bring your calculator to the book store. Students are **required** to register their own calculator in the bookstore. This will help identify your calculator in the event that it is lost or stolen as well as it will inform your math teacher that you have the required calculator for class.

Which calculator should I purchase?*



CASIO fx-9750G

CASIO fx-9570GII

This is the most basic and least expensive graphing calculator available. Suggested retail is under \$50. For the majority of high school math students, this calculator will be sufficient for 4 years of high school math.

CASIO fx-9860G **CASIO fx-9860GII**

This calculator has all of the functionality of the fx-9750G with more memory, natural display capability, backlighting, and more. This device allows students to download information for classes other than math. Suggested retail is \$80.



CASIO ClassPad or CASIO PRIZM models are also acceptable; however, both are significantly more expensive than the models listed above.

TI-83, TI-83 Plus, and TI-84 Plus models are also acceptable. If one has already been purchased or if a student has a sibling with a TI calculator, that's OK. These are the standard calculators used at most colleges, and all teachers will be able to support these models. However, the cost is significantly more expensive and the Casio calculators are being recommended for all 9th grade students.

TI-85, TI-86, TI-89, and TI-Nspire models are NOT recommended. These calculators have more functionality than is required for a high school student, and are significantly more expensive. Math teachers will not be able to support these calculators.

*While other calculators may perform some or all of the same functions of those listed above, the math staff at Riverside will teach and be able to assist students ONLY with the models listed above. Students who choose to purchase a different graphing calculator will be responsible for reading the manual and learning its operation.

Course Outline

In Algebra, we will explore the following topics:

- **Descriptive Statistics**
Students build on their understanding of key ideas for describing distributions (shape, center, and spread) studied in previous grades. This enhanced understanding allows students to make more informed decisions, often involving comparisons of data sets. Students use visual displays to choose the more appropriate measure of center and variability and to justify their choice through statistical reasoning. Students recognize that some data sets can be summarized through a normal distribution, which will further aid their decision-making process.
- **Relationships between Quantities and Reasoning with Expressions and Equations**
In this critical area, students will develop fluency in writing, interpreting, and translating between various forms of expressions, and use them to solve problems. All of this work is grounded on understanding quantities and on relationships between them.
- **Linear Relationships**
In this unit, students will learn function notation and develop the concepts of domain and range. They move beyond viewing functions as processes that take inputs and yield outputs and start viewing functions as objects in their own right. They explore many examples of functions, including sequences; they interpret functions given graphically, numerically, symbolically, and verbally, translate between representations, and understand the limitations of various representations. They work with functions given by graphs and tables, keeping in mind that, depending upon the context, these representations are likely to be approximate and incomplete. Their work includes functions that can be described or approximated by formulas as well as those that cannot. When functions describe relationships between quantities arising from a context, students reason with the units in which those quantities are measured. Specifically, students will analyze linear relationships, whether as a graph, equation, table of values, or verbal description, in order to create and use linear functions.
- **Linear Models**
Students will identify variables in situations and select those that represent essential features. They will then formulate a model by creating and selecting graphical, tabular, algebraic, or statistical representations that describe relationships between the variables, analyze and perform operations on these relationships to draw conclusions, and interpret the results of the mathematics in terms of the original situation. Students use graphical representations and knowledge of the context to make judgments about the appropriateness of linear models. With linear models, they look at residuals to analyze the goodness of fit.
- **Systems of Equations and Inequalities and Linear Programming**
Students will apply graphical and algebraic methods to explore systems of equations and inequalities, and then find and interpret their solutions. This understanding leads to a culminating experience in linear programming where students need to use their knowledge to find possible solutions to maximize or minimize a value of an expression.
- **Exponential Relationships and Models**
In the last unit, students formulated linear models by creating and selecting graphical, tabular, algebraic, or statistical representations that described relationships, analyzed and performed operations on these relationships to draw conclusions, and interpreted the results of the mathematics in terms of the original situation. In this unit, students will apply these skills to create and interpret exponential models. Students will also compare and contrast linear and exponential functions, distinguishing between additive and multiplicative change. They will interpret arithmetic sequences as linear functions and geometric sequences as exponential functions.
- **Khan Academy**
New this year, students will be improving their math skills by working on Khan Academy in class one day a week. This is computer-based instruction and practice which will require the use of earbuds or headphones brought from home.

Classroom Rules

Be Responsible

- Be on time to class every day.
- Have all required class materials, including your graphing calculator.
- Phones and electronics are not used during class.
- Food, gum, and drinks (except water) are put away during class.
- Pick up after yourself.

Be Respectful

- Comments should be relevant to the topic being discussed by the teacher or another student.
- Please be sincere and respectful. Sarcastic and disrespectful comments or behavior toward anyone is not acceptable.
- Be respectful of staff, students, and school property. Keep your hands, feet, and other objects to yourself.
- Have a positive and cooperative attitude.
- Use appropriate language.
- Demonstrate appropriate school behavior.
- Listen attentively.

Honor Academics

- Be prepared for class.
- Keep your math notebook and folder organized.
- Participate in all class activities, both group and individual.
- Be on-task.
- Work to your potential.
- Demonstrate academic integrity. Complete your own assignments on time.
- Cheating and plagiarism are not tolerated.

Be Safe

- Follow school and classroom rules.
- Follow staff directives.
- Secure your personal items effectively.
- Keep walkways clear.
- Follow the dress code.
- Follow directions the first time they are given.
- When one person is addressing the whole class, listen attentively.
- In groups, work together and stay on-task.
- Be respectful of others and their property and person.

Consequences


If a student breaks a rule, any of the following can occur:

- ✓ Confiscation of electronic device
- ✓ Verbal warning
- ✓ Written assignment
- ✓ Student-teacher conference
- ✓ Phone call to parents
- ✓ Administrative referral
- ✓ After-school detention

RUHS Citizenship Rubric

“Try your hardest, do your best and give your all.”

To earn a RESPECT CITIZENSHIP grade you must meet 3 or more criteria in one number band.

	Be Responsible	Be Respectful	Honor Academics	Be Safe
 4	<p>Always</p> <ul style="list-style-type: none"> on time to class phones, electronics are off and unseen food and drinks are not present during class (except water) 	<p>Always</p> <ul style="list-style-type: none"> respectful of staff, students and school property uses appropriate language demonstrates appropriate school behavior 	<p>Always</p> <ul style="list-style-type: none"> prepared for class participates on task works to potential demonstrates academic integrity 	<p>Always</p> <ul style="list-style-type: none"> follows school and classroom rules follows staff directives secures personal belongings follows dress code
3	<p>Consistently</p> <ul style="list-style-type: none"> on time to class phones, electronics are off and unseen food and drinks are not present during class (except water) 	<p>Consistently</p> <ul style="list-style-type: none"> respectful of staff, students and school property uses appropriate language demonstrates appropriate school behavior 	<p>Consistently</p> <ul style="list-style-type: none"> prepared for class participates on task works to potential demonstrates academic integrity 	<p>Consistently</p> <ul style="list-style-type: none"> follows school and classroom rules follows staff directives secures personal belongings follows dress code
2	<p>Occasionally</p> <ul style="list-style-type: none"> on time to class phones, electronics are off and unseen food and drinks are not present during class (except water) 	<p>Occasionally</p> <ul style="list-style-type: none"> respectful of staff, students and school property uses appropriate language demonstrates appropriate school behavior 	<p>Occasionally</p> <ul style="list-style-type: none"> prepared for class participates on task works to potential demonstrates academic integrity 	<p>Occasionally</p> <ul style="list-style-type: none"> follows school and classroom rules follows staff directives secures personal belongings follows dress code
1	<p>Rarely</p> <ul style="list-style-type: none"> on time to class phones, electronics are off and unseen food and drinks are not present during class (except water) 	<p>Rarely</p> <ul style="list-style-type: none"> respectful of staff, students and school property uses appropriate language demonstrates appropriate school behavior 	<p>Rarely</p> <ul style="list-style-type: none"> prepared for class participates on task works to potential demonstrates academic integrity 	<p>Rarely</p> <ul style="list-style-type: none"> follows school and classroom rules follows staff directives secures personal belongings follows dress code

Absences & Tardiness

After an absence, it is the student's responsibility to request any make-up from the absence. Students are expected to arrive to class on time or have a pass from a staff member for a legitimate excuse.

Homework Policy

REVIEW, REVISE, REDO

Riverside's Homework Policy:

The policy of Riverside University High School is to assign homework in all classes. Research has demonstrated that schools that require homework show higher student achievement than schools that make little use of it. Increased homework time results in higher grades for students of all ability levels. Homework also develops responsibility, self-reliance, and resourcefulness which are requisite skills for success in post-secondary endeavors.

Student Guidelines:

- Record all homework assignments and due dates in your assignment book.
- Show pride in your work.
- Be neat and accurate.
- Homework is to be labeled with your name, hour, due date, and lesson heading.
- Be prepared to either correct or turn in homework at the beginning of class.
- Returned homework is to be kept in the folder.
- Students may talk to each other about homework; however, identical homework papers will be assumed to be plagiarized and consequences imposed accordingly.

Student Consequences:

- All work is required to be completed. Late work will be noted except in cases of excused absences.
- Plagiarized papers will receive no credit for any student involved.

Students who are absent should:

- Check with the teacher for any homework assigned.
- Ask the teacher upon their return to find if they've missed instruction of a new concept.
- Understand that the teacher may not be able to address their concerns immediately at the beginning of class; they may have to wait for an appropriate time.

Homework Frequency and Duration:

- Students should expect homework to be assigned daily.
- Students who participate in extracurricular activities or hold a job are still expected to complete their homework.

Homework Guidelines for Parents/Guardians:

- Present a positive attitude toward homework.
- Schedule homework as a priority in your family routine.
- Ask your child to explain his or her homework to you as well as what he or she did in class.
- Ask to see your child's daily assignment planner.
- Provide an appropriate location conducive to study.
- **Please** do not do your child's homework, but be available to review the work with your child.
- Praise your child's efforts when appropriate.
- Encourage your child to be responsible---parents aren't expected to bring the homework to school if it was forgotten at home.

Grading

The content of this course will be broken down into main content standards or objectives. Within each standard, assessments will be given one of the following grades; **AD, PR, BA, MI, or O**. As new pieces of evidence in each standard will be collected through tests, projects, portfolios, presentations, assignments, etc., older grades can be replaced. To ensure a passing grade, students will need to stay for **student support** to redo any evidence with a grade of **BA or MI**. We **expect** students to earn a **PR or AD** grade on all evidence. This will be monitored.

Failure is not an option.

Students must show responsibility for their own learning by completing daily assignments (both in-class and homework). These will be turned into a portfolio every Friday. The responsibility is on the students' shoulders to demonstrate their mastery of concepts/skills in each class.

Grade	Meaning of Grade
Advanced (AD)	<ul style="list-style-type: none"> • The student exhibits exceptional mastery of the course objective. • Means that you understand and solve problems with <i>no errors</i> and possibly extends the problem beyond what is asked. • Exceeding grade level expectations.
Proficient (PR)	<ul style="list-style-type: none"> • The student provides evidence of mastery of the course objective. • Means that you understand and solve problems with <i>no conceptual errors</i>. Minor <i>computational</i> or <i>elementary</i> errors (i.e. adding, multiplying, fractions, etc.) may be present without penalty. • Meeting grade level expectations.
Basic (BA)	<ul style="list-style-type: none"> • The student provides evidence of a beginning understanding of the course objective, but has not mastered the objective. • Means that you almost understand, but have <i>conceptual errors</i> in the current objective. • Just below grade level expectations.
Minimal (MI)	<ul style="list-style-type: none"> • The student attempts the task but provides no evidence of mastery of the objective. • Means that you are still learning and make some major errors. • Far below grade level expectations.
No Evidence (0)	<ul style="list-style-type: none"> • There was no attempt or attempt was plagiarized. • Means that you were absent or copied off someone else.

Infinite Campus will then convert the AD, PR, BA, MI, and O using the conversions above and average the percentages. The report card will then use that average and show a standard letter grade based on the following scale:

A 90 – 100, **B** 80 – 89 **C** 70 – 79 **D** 60 – 69 **U** 0 – 59

Exams

All students will be taking the course final assessments at the end of semesters 1 and 2. Students that have demonstrated proficiency (letter grade of 'B' or higher) in a course and have met the following criteria will be exempt from the final assessment for the course.

The criteria for students to exempt from the Course Final Assessment are:

1. Must demonstrate proficiency (Letter grade of 'B' or higher)
2. Have 95% attendance or higher in the course (No more than 4 excused absences)
3. No unexcused absences
4. Off the Unfinished Business List (fees and fines)

Algebra 1

Parents/Guardians:

Please sign and return this page to Ms. Zietlow or Mr. Booker ASAP as it shows you and your student have reviewed and understand the policies of our classroom.

You may keep the other pages with my contact information for yourself. If you have questions at any time, please feel free to contact us.

Thank you,

Ms. Zietlow
Mr. Booker

Student Name (please print): _____

Parent/Guardian Name (please print): _____

Parents: What is the best way to contact you during the school day?

_____ Home phone _____ Work phone _____ Cell phone _____ Email

Phone number or email: _____

I have seen the syllabus for this class, and I understand that all students will be held accountable to it.

Student Signature: _____

Parent/Guardian Signature: _____

I understand that my student needs the following supplies by Monday, August 21st.

- One spiral notebook **OR** binder with loose-leaf paper
- 1-2 folders
- Pencils and an eraser
- Earbuds or headphones
- Casio Graphing Calculator

Parent/Guardian Signature: _____

This questionnaire will help me get to know your student and his or her individual needs better.

1. How would you rate your student's ability in math?

Poor				Excellent
1	2	3	4	5

2. How would your student rate their own ability in math?

Poor				Excellent
1	2	3	4	5

3. What do you think is your student's opinion of math?

Hates it				Loves it
1	2	3	4	5

4. What are some things that your student needs from me in order to succeed in math this semester?

5. What specific skills do you think your student needs assistance with in math this semester?

6. Which of the following best describes your student's situation in math last year?

- Things went very well - no difficulties.
- Things went pretty well - experienced some challenges.
- Things were difficult - some problems understanding concepts.
- Things were terrible - my child was completely lost.

7. Is there anything that I should know about your student that would assist me with their learning?

8. What would you like to see from me as your student's math teacher this semester?

9. Any additional comments, concerns or questions?