



Course Name	Instructor	Instructor E-mail & Availability
Core 2 Integrated Mathematics	Kizer, Bradley	bbkizer@aps.k12.co.us
Course Website (Google Classroom Access Codes)	Class Meeting Times & Location:	Prerequisites
2nd Period: w44dghs 3rd Period: kw1gp3y 4th Period: wukbr5 7th Period: rt97wz	2nd Period: (MTW) 8:40-9:35, (F) 8:10-9:35 3rd Period: (MTW) 9:40-10:35, (Th) 10:10-11:35 4th Period: (MTW) 10:40-11:35, (F) 9:40-11:05 7th Period: (MTW) 2:20 -3:15, (Th) 1:50-3:15	Core 1 Integrated Mathematics

### Course Description

Core 2 is an integrated math class that consists of Algebra, Geometry, Probability, and Statistics concepts. This class is geared for the 10th grade level if you are on track to graduate and go to college.

### Standards

1. Choose and interpret units consistently in formulas. (CCSS: N-Q.1)
2. Determine an explicit expression, a recursive process, or steps for calculation from a context. (CCSS: F-BF.1a)
3. Create equations and inequalities<sup>20</sup> in one variable and use them to solve problems. (CCSS: A-CED.1)
4. Create equations in two or more variables to represent relationships between quantities and graph equations on coordinate axes with labels and scales. (CCSS: A-CED.2)
5. Solve systems of linear equations exactly and approximately,<sup>24</sup> focusing on pairs of linear equations in two variables. (CCSS: A-REI.6)
6. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.<sup>25</sup> (CCSS: A-REI.7)
7. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. (CCSS: S-ID.2)
8. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). (CCSS: S-ID.3)
9. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. (CCSS: S-ID.6a)
10. Describe statistics as a process for making inferences about population parameters based on a random sample from that population. (CCSS: S-IC.1)
11. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. (CCSS: S-IC.5)
12. Explain that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. (CCSS: S-CP.2)
13. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model. (CCSS: S-CP.6)
14. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.\* (CCSS: G-SRT.8)
15. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems.<sup>12</sup> (CCSS: G-GPE.5)
16. Use coordinates and the distance formula to compute perimeters of polygons and areas of triangles and rectangles.\* (CCSS: G-GPE.7)

### Learning Outcomes by Quarter

**Quarter 1**

Students will be able to apply properties of polynomials.  
 Students will be able to solve for the zeroes of polynomials.

**Quarter 2**

Students will be able to identify and calculate key features of a polynomial.  
 Students will be able to create equations and inequalities given a word problem.  
 Students will be able to solve a system of inequalities.

**Quarter 3**

Students will be able to solve for a variable given a function.  
 Students will be able to apply geometric functions to solve real world problems.

**Quarter 4**

Students will be able to use a unit circle to identify key trig functions in radians.  
 Students will be able to analyze statistical data from surveys, experiments, and observational studies.  
 Students will be able to determine and explain whether statistical data is biased or random and why.

<b>Required Supplies</b>
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<b>Grading</b>
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Students will be graded on a 4 point scale for all assignments

Point	Letter Grade	Explanation
3.0-4.0	A	In addition to the performance score of 3.0, the student demonstrates in depth inferences and applications that extend beyond what was taught.
2.5-2.99	B	There are no major errors or omissions regarding any of the information and/or processes (simple or complex) that were explicitly taught. This level is mastery
2.0-2.49	C	There are no major errors or omissions regarding the simpler details and processes, but there are major errors or omissions regarding the more complex ideas and processes.
1.0-1.99	D	With help, the student demonstrates a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.
Below 1.0 or No Evidence	F	Even with help, the student cannot demonstrate understanding of the simple details.

<b>School Policies</b>
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REQUESTS FOR HOMEWORK

Students requiring homework assignments due to extended excused absences (three days or more) should initially contact the attendance office. The attendance office will notify teachers and collect assignments from individual teachers. Assignments should be ready for pick up 24 hours after a request has been made. Please call the attendance office to check homework status.

MAKE-UP WORK DURING ABSENCES

Any time a student misses a class for any reason whatsoever, that student will be expected to contact each teacher and complete the make-up work in order to achieve the learning objective. This includes field trips, school activities, suspensions, group sessions, truancies, and the like. Make-up work is required and students who have been absent from class must request make-up work from the teacher no later than the next class meeting. Teachers will determine a reasonable amount of time for make-up work when students are absent, using a two days for every one day absent guideline.

Teachers may provide an "alternative" learning experience for make-up work to any student who requests it upon returning to class. For example, a student may have been absent from a class at which the daily learning objective was achieved by means of a class discussion. At the teacher's sole discretion, students who were absent during that discussion might be assigned a two or three-page written essay due three or four days after the student's return to class as an 'alternative' learning experience for that objective.

Teachers will give academic credit to all make-up work that complies with the above guidelines. The only exception is that teachers have the choice whether or not to give academic credit to the make-up work from an unexcused absence. If the absence was unexcused, the teacher should provide feedback but is not required to give credit for the work.

TARDY POLICY

After three tardies teachers will conference with the student and contact home. After 5 tardies students can be referred to the Learning Center and additional consequences may be assigned.

PASSES

Students who leave the classroom or are excused from class must have a pass with correct validation by the teacher. School officials may send for a student using an authorized Administrative Pass. Students who are without official passes will be subject to disciplinary action. Passes will not be given in the first 10 minutes or last 10 minutes of class.

NON-ACADEMIC TECHNOLOGICAL DEVICES

Aurora Public Schools believes in providing environments that optimize learning and teaching and are safe, secure, and well maintained. As such, all personal electronic devices\* shall not be seen nor heard during the school day in academic areas of the building from 7:30 A.M. to 3:45 P.M. \*Cell phones, iPods, headphones, portable speakers, MP3s, tablets, cameras, etc. **Aurora Central High School is not responsible for lost, stolen or damaged electronic devices.** This includes electronic devices that are confiscated by staff. Aurora Central High School reserves the right to not investigate lost, stolen or damaged electronic devices.

**Classroom Policies**

NON-ACADEMIC TECHNOLOGICAL DEVICES

As outlined in the school-wide policies and expectations, Aurora Central High School is dedicated to maximizing learning in the classroom by minimizing unnecessary distractions. Therefore, all personal electronic devices (cell phones, iPods, headphones, portable speakers, tablets, cameras, etc.) will be stored in Mr. Kizer's electronics bin. If students feel uncomfortable surrendering their property over to the teacher, that is fine. However, if a prohibited device is seen even once during instructional time, Mr. Kizer will be confiscating the device until the end of the school day. Students who continue to break this rule will have their devices confiscated and their parents will be required to communicate with the teacher about how to restore focus and improve learning. If the problem persists further, students will receive a behavioral referral and the disciplinary matter will be moved up the ladder to administration.

HOMEWORK AND PARTICIPATION

Though most of a student's grade is calculated from their formative assessments, homework and class

participation will be factored into the final grade as well. Students will be given a handout every day in class. Students will complete and keep their daily work with them. At the end of each week, students will turn in ALL of their completed daily handouts for a participation grade.

In addition, students will be assigned 3-5 practice problems a week. Students will turn in their practice problems every Thursday or Friday, depending on their schedule. If a student misses the daily handout or homework assignment, they may collect the work from one of the shelves by the chalkboard. The student then has up to two weeks to complete the work.

**ACADEMIC DISHONESTY**

Any student caught cheating on a test or quiz will receive a zero.

At my discretion, the student who provided the answer will also receive a zero.

Students will be allowed to make-up the assessment but they must do so on their own time. No make-ups will be allowed during the school day. Mr. Kizer arrives to school at 6:45 in the morning and often stays well passed 5 p.m.

**All other Classroom Policies will be created with the class's feedback and updated in our Google Classroom.**

**\*See Course Website above for access codes.**

**Tear off and return THIS PAGE only and return to \_\_\_\_\_(teacher).**

I have carefully read the expectations of this course and agree to support the goals and initiatives of the course. I will show up, speak up, stand up and go further than I ever thought possible.

Student name: \_\_\_\_\_(print)

Grade \_\_\_\_\_ Period \_\_\_\_\_

Student Signature: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

Parent/Guardian Phone Number: \_\_\_\_\_

Parent/Guardian Email: \_\_\_\_\_