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| **School Year** | 2019-2020 | **Teacher Name** | Megan Shaw |
| **Room/Office** | Room 233 | **Website** | mathforshaw.weebly.com |
| **Phone** | (720) 972 - 2665 | **Email Address** | megan.shaw@adams12.org |
| **PBL Date** | December (date TBD) | **Panel Date** | TBA |

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| **Course Name** | Integrated Math 3 | | |
| **Course Description** | Integrated Math 3 continues the integrated development of high school mathematics along the interwoven strands of algebra, functions, geometry, trigonometry, statistics and probability. Focused units of study connect these strands through an emphasis on reasoning and proof in geometric, algebraic, and statistical contexts and of basic principles that underlie those reasoning strategies. Inequalities and linear programming will extend students' ability to reason both algebraically and graphically with topics that include inequalities in one and two variables including absolute value and quadratic inequalities. Students will extend their understanding to similarity and congruence and use those relations to solve problems and to prove geometric assertions with and without the use of coordinates. Students will work on developing an understanding of the measurement of variability including normal distribution, standardized scores and binomial distributions. Polynomial and rational functions will extend students' abilities to represent and draw inferences using symbolic expressions and manipulations. The last units of study for this course will focus upon circles and circular functions, recursion and iteration, and finally inverse functions with a focus on logarithmic functions and their use in modeling and analyzing problem situations and data patterns. | | |
| **Unit of Study** | **Grade Level Expectations/Content Standards** | **Approximate Time Spent or Percent of time Spent** | **Targeted Date of Assessment** |
| Unit 1:  Reasoning and Proof | * Use formal reasoning in geometric, algebraic and statistical contexts | 22 days | 9/20/2019 |
| Unit 3:  Similarity and Congruence | * Use similarity and congruence to solve problems * Prove geometric assertions with and without the use of coordinates | 24 days | 11/1/2019 |
| Unit 2:  Inequalities and Linear Programming | * Reason algebraically and graphically to solve inequalities in one and two variables * Use a strategy for optimizing a linear function in two variables within a system of linear constraints on those variables | 19 days | 12/13/2019 |
| Unit 4:  Samples and Variation | * Use the normal distribution as a model of variation * Make decisions using the binomial distribution * Use probability and statistical inference for statistical process control | 18 days | 2/6/2020 |
| Unit 5:  Polynomial and Rational Functions | * Represent and draw inferences about polynomial and rational functions using symbolic expressions and manipulations | 23 days | 3/20/2020 |
| Unit 6:  Circles and Circular Functions | * Use properties of circles to solve problems * Use circular functions to model periodic change | 21 days | 5/8/2020 |
| Unit 8:  Inverse Functions | * Use inverse functions, especially logarithmic functions to model and analyze problems situations and data patterns | 5 days | 5/15/2020 |

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| **Grading Scale** | | **Grade Percentages/Weights** | |
| **A** | 90-100 | **Formative\***  20% | **Summative\***  80% |
| **B** | 80-89 |
| **C** | 70-79 |
| **D** | 60-69 | **\*Weekly progress grades are posted at https://ic.adams12.org/campus/portal/adams12.isp** | |
| **F** | 59 or below |

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| **General Expectations**   * Grades are based upon the demonstration of proficiency on units associated with a standard given during each formative or summative assessment. Formative grades in addition to summative unit assessments will be used to holistically determine your grade. * **Summative: 80%** Summative measures of achievement are taken when unit mastery is expected. (i.e., unit tests, culmination of a project, embedded assessments, etc.) * **Formative: 20%** Formative assessments measure the scaffolding skills and/or content embedded in the unit. Formative assessments are taken frequently, after a student has practiced a skill or become familiar with content. Examples of formative assessments include but are not limited to exit tickets, paragraphs, oral check for understanding, warm-ups, stages in a large project, etc. * Assessments will be graded based on teacher/district/state rubrics. * On group projects, students will receive a grade for individual work and a group grade. * Grades are based on achievement of Content Standards and Grade Level Expectations. |
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| **Class Expectations**  **Missing or incomplete assignments/assessments for this course:** Superintendent Policies 6280 Homework and 6281 Make-Up Work, will be followed for this course. No missing work from a unit will not be accepted after the unit test has been taken. |
| **Additional Help:**   * I will be available in room 233 during 1st hour, 3rdhour, or 5b lunch most days to give extra help. Please let me know if you plan on stopping by. If that time does not work, please set an appointment.   **Materials and Supplies Needed Daily**   * Paper, Pencil , Textbook: Textbook: *Contemporary Mathematics in Context, Course 3*, Graph paper, Calculator: TI83 or 84 (will be provided during class if student doesn’t have one)   **Accommodations**  A variety of teaching techniques are used to meet the diverse needs of students. I am available by phone or appointment to discuss concerns or needs of students with special needs.  **Assessments Used To Evaluate Student Progress**  Assignments, Investigations, Observations, Participation, Quizzes, and Tests  **Motivation Used**   * A variety of hands-on techniques, investigations, real-world contexts and group work that engage and stimulate students to think about math are a part of this curriculum. * Students are encouraged to be engaged and motivated in the completion of their assignments. |
| **Student Expectations** |
| **Participation**   * Students will be working collaboratively and actively in groups. Each student is expected to be reading the assigned text and writing/making computations for each problem given in an investigation. Thus, every student will be expected to work and participate each day.   **Classroom Rules/Expectations**   * No cell phones/electronics should be out during class time. The first time in a semester that an electronic device is seen the student will be asked to put it away. The second time the device will be taken away for the remainder of the class period. After that the device will be taken to Student Relations to be picked up after school. * Food/drinks are allowed in the classroom unless it becomes a distraction and/or trash and spills are left on the desks and floors.   **Retakes**  Retakes will not be given. Please be prepared ahead of time and get extra help if needed. Formative assessments should be used to practice and learn for Summative or Unit Tests. |

**Additional Rules and Expectation may be implemented at any time.**

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*“I have read the above expectations and agree to abide by them.”*

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

*“I am aware of the expectations for this class. Contact me if a situation requires my attention.”*

Parent/Guardian Name (please print):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Preferred method of contact: \_\_\_\_\_\_\_ Email \_\_\_\_\_\_\_Phone (daytime) \_\_\_\_\_\_\_Phone (evening)

Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone (daytime) :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_( evening):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_