

Syllabus: Practices & Policies

| 2021-2022 | Franklin High School | | | |
|---|---|--|--|--|
| Section 1: Course Overview | | | | |
| Course Title | Algebra 3/4 | | | |
| Instructor Info | Name: Dr Marla Baber Contact Info: mbaber@pps.net | | | |
| Grade Level(s) | 9th-11th | | | |
| Room # for class | Room: S-027(Periods 2,3,4,5,& 6) and S-028 (Period 8) | | | |
| Credit | Type of credit: Mathematics # of credits per semester: 1 | | | |
| Prerequisites (if applicable) | Algebra ½ or Compacted Math & Geometry | | | |
| General Course | We will study the concepts of Advanced Algebra and functions to gain greater understanding of | | | |
| Description | mathematics so they can use it in career or as they move on in their education. | | | |
| Section 2: Welcome Statement & Course Connections Personal Welcome Welcome to our new model of teaching in PPS. We are embarking on an old & new adventure in learning this year. | | | | |
| | It's great to see everyone's amazing eyes, but I do miss noses and mouths. | | | |
| | Algebra 3/4 in my opinion is the most important math class in high school. It takes everything you have covered in | | | |
| | school mathematics and ties it together. We will do basic arithmetic skills, algebraic manipulation, graphing, and trig | | | |
| | functions all to solve more complex problems that can be applied to all sorts of situations and careers. There w | | | |



| | times it is difficult, place keep a growth mindset and I promise I will help you on this path. If the material does not | | | |
|----------------------------|---|--|--|--|
| | stick using one method we can look at it from a different lens and try again. Tell you a secret, I was not always good | | | |
| | at math which I think helps me see the many paths one can use to get the same outcome. Math is just like life, if | | | |
| | one path is blocked, look for another to get to your destination, there is not only one way to get there. During the | | | |
| | journey you can experience many special things, be open to options! | | | |
| | Journey you can experience many special triings, be open to options: | | | |
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| Course Highlights (topics, | Using the mathematical practices of: | | | |
| themes, areas of study) | Making sense of problems and persevere in solving them. Reasoning abstractly and quantitatively. | | | |
| | Constructing viable arguments and critique the reasoning of others. | | | |
| | Modeling with mathematics. | | | |
| | Using appropriate tools strategically. | | | |
| | 6. Attending to precision. | | | |
| | 7. Looking for and make use of structure. | | | |
| | 8. Looking for and express regularity in repeated reasoning. | | | |
| | 0: Being a mathematician & Building Community (Soft Start Weeks) | | | |
| | 1: Equations & Patterns | | | |
| | 2: Quadratics | | | |
| | 3: Parent Functions & Transformations | | | |
| | 4: Inverse Functions | | | |
| | 5: Log & Exponential Functions | | | |
| | 6: Complex Numbers | | | |
| | 7: Polynomials | | | |
| | 8: Rational Expressions | | | |
| | 9: Trig Functions & Unit Circle | | | |
| | 10: Statistics | | | |
| | | | | |
| Course Connections to PPS | The PPS ReImagined standards we will focus on are: | | | |
| Relmagined Vision | Inclusive and Collaborative Problem Solvers | | | |
| | 2 .Inquisitive Critical Thinkers with Deep Core Knowledge | | | |
| | 3. Positive, Confident, and Connected Sense of Self | | | |
| | The mathematical practices help foster the skills and vision of PPS | | | |



Section 3: Student Learning

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|-----------------------------|---|--|
| Prioritized Standards | Creating Equations | |
| | HSA-CED.A. Create equations that describe numbers or relationships. | |
| | Reasoning with Equations & Inequalities | |
| | HSA-REI.B. Solve equations and inequalities in one variable. | |
| | HSA-REI.D. Represent and solve equations and inequalities graphically. | |
| | Seeing Structure in Expressions | |
| | HSA-SSE.B. Write expressions in equivalent forms to solve problems. | |
| | Reasoning with Equations & Inequalities | |
| | HSA-REI.B. Solve equations and inequalities in one variable. | |
| | Interpreting Functions | |
| | HSF-IF.A. Understand the concept of a function and use function notation. | |
| | HSF-IF.B. Interpret functions that arise in applications in terms of the context. | |
| | HSF-IF.C. Analyze functions using different representations. | |
| | Building Functions & Interpreting Functions | |
| | HSF-BF.B. Build new functions from existing functions. | |
| | HSF-IF.B. Interpret functions that arise in applications in terms of the context. | |
| | HSF-BF.B. Build new functions from existing functions. | |
| | HSF-IF.C. Analyze functions using different representations. | |
| | Linear, Quadratic, and Exponential Models | |
| | HSF-LE.A. Construct and compare linear and exponential models and solve problems. | |
| | The Complex Number System | |
| | HSN-CN.A. Perform arithmetic operations with complex numbers. | |
| | HSN-CN.C. Use complex numbers in polynomial identities and equations. | |
| | Arithmetic with Polynomials & Rational Functions | |
| | HSA-APR.A. Perform arithmetic operations on polynomials. | |
| | HSA-APR.B. Understand the relationship between zeros and factors of polynomials. | |
| | Interpreting Functions | |
| | HSF-IF.C. Analyze functions using different representations. | |
| | Arithmetic with Polynomials & Rational Functions | |
| | HSA-APR.D. Rewrite rational expressions. | |
| | HSF-IF.C. Analyze functions using different representations. | |
| | Trigonometric Functions | |
| | HSF-TF.A. Extend the domain of trigonometric functions using the unit circle. | |

HSF-TF.B. Model periodic phenomena with trigonometric functions.

HSF-TF.C. Prove and apply trigonometric identities.



| | Interpreting Categorical & Quantitative Data | | | |
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| | HSS-ID.A. Summarize, represent, and interpret data on a single count or measurement variable | | | |
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| PPS Graduate Portrait | I will help students grow their knowledge and skills in the following aspects of PPS's Graduate Portrait | | | |
| <u>Connections</u> | by: | | | |
| | Building capacity to persevere in problem solving | | | |
| | developing a growth mindset | | | |
| | Helping them learn advocate for themselves | | | |
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| | 4. Learn to communicate mathematically | | | |
| | 5. Critique others work and take input on their own work in a mindful manner | | | |
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| Differentiation/ | I will provide the following supports specifically for students in the following programs | | | |
| accessibility strategies | Special Education, 504 Plans, English Language Learners, & Talented & Gifted by: | | | |
| and supports: | | | | |
| | Students have opportunities to experience algebra through differentiation of curriculum both for enrichment and | | | |
| | reconstruction of concepts. Students are given access to concepts through different means. This is done | | | |
| | automatically for students who are on an IEP's, TAG and in ELL. If you believe you (or your child) would benefit from | | | |
| | differentiation, please let me know. Honors credit is available through contract and will be posted on Wednesday | | | |
| Parsanglized Lagraina | Canvas & shared in class time. | | | |
| Personalized Learning | Career Related Learning Experience (CRLE) #1 | | | |
| Graduation Requirements (as applicable in this course): | ☐ Career Related Learning Experience (CRLE) #2 | | | |
| (us applicable in this course). | -The experience(s) will be: | | | |
| | ☐ Complete a resume | | | |
| | ☐ Complete the My Plan Essay | | | |
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| 6 | | | | |
| Section 4: Cultivating Culturally Sustaining Communities | | | | |
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| Tion 1 CEL Streets size | | | | |
| Tier 1 SEL Strategies | Luill facilitate the greation of our Chared Agreements that respects and calchrates each student's respect | | | |
| | I will facilitate the creation of our Shared Agreements that respects and celebrates each student's race, | | | |
| | ability, language, and gender identity in the following way(s): | | | |



| Shared Agreements | Students will writ class norms together with the focus on all can and will learn mathematics no matter | | | | | |
|-------------------------|--|--|--|--|--|--|
| | what their race, ability, language, and gender identity | | | | | |
| | Students will work to respect pronouns. | | | | | |
| | Students will be mindful that everyone comes with different skills and working together makes them | | | | | |
| | stronger mathematicians. | | | | | |
| | | | | | | |
| | I will display our Agreements in the following locations: | | | | | |
| | On wall in class & student journals | | | | | |
| | | | | | | |
| | Not plan for engaing feedback through year on their effectiveness is | | | | | |
| | My plan for ongoing feedback through year on their effectiveness is: | | | | | |
| | 1. Weekly check ins | | | | | |
| | 2. Surveys in Google form | | | | | |
| | 3. Journal prompts & reflections | | | | | |
| Student's Perspective & | I will cultivate culturally sustaining relationships with students by: | | | | | |
| Needs | 1. Getting to know each of them. | | | | | |
| | 2. Making sure I talk to each kiddo at least once a week | | | | | |
| | | | | | | |
| | Families can communicate what they know of their student's needs with me in the following ways: | | | | | |
| | Monthly newsletters send by Synergy | | | | | |
| | 2. Remind | | | | | |
| | 3. My Canvas & Website | | | | | |
| Empowering Students | I will celebrate student successes in the following ways: | | | | | |
| | 1. Mathematician of the Term | | | | | |
| | 2. Verbal Praise | | | | | |
| | 3. Allowed them to choose their own groups | | | | | |
| | 4. emails postcards home | | | | | |
| | 5. Dance Parties | | | | | |
| | | | | | | |
| | I will solicit student feedback on my pedagogy, policies and practices by: | | | | | |
| | Asking students for input on my practice | | | | | |
| | 2. Surveys on Google Forms | | | | | |
| | 3. Interviews with students | | | | | |



| Showcasing Student | When class agreements aren't maintained (i.e. behavior) by a student I will approach it in the following ways: 1. Discuss in a non-threatening/caring way about the issue 2. Reteach protocol/norms 3. Talk to parents 4. Use restorative justice if damage is done to others or materials I will provided opportunities for students to choose to share and showcase their work by: | | |
|---|--|--|--|
| Assets | Doing projects that students can share work Building in situations in which students can share and feel safe doing it. | | |
| | Section 5: Classroom Specific Procedures | | |
| Safety issues and requirements (if applicable): | Students are asked to keep on masks and to stay 6 feet apart when possible, if not 3 feet apart. Students are asked to only eat snacks during outside breaks and stay 6 feet apart when doing so. We have both hand sanitizer and disinfectant wipes available for students if they wish to use them in class. | | |
| Coming & Going from class | I understand the importance of students taking care of their needs. Please use the following guidelines when coming and going from class: Let me always know where you plan to go and check if it is a good time in the lesson. | | |
| | f a student misses a deadline, I will partner with the student in the following ways so they have the | | |
| Submitting Work | I will collect work from students in the following way: Viva the journal and Carnegie Learning Text. If a student misses a deadline, I will partner with the student in the following ways so they have the ability to demonstrate their abilities: by meeting with me and working through the material. | | |

Revision Opportunities: Always, math is a subject that is best riveted like a "Rough Draft" to better



| | understand and show proficiency. |
|-----------------------|---|
| Formatting Work (if | Directions on how to format submitted work (ex. formal papers, lab reports, etc) can be found here: In |
| applicable) | Canvas |
| Attendance | If a student is absent, I can help them get caught up by: Going to Canvas and looking at the material we |
| | covered and see me for help understanding the material either in tutorials or after school Mondays & |
| | most Thursdays. |
| | |
| | Section 6: Course Resources & Materials |
| Materials Provided | I will provide the following materials to students: All materials, journal, textbook to write in & |
| | calculator. I ask them to bring a writing utensil, but I have them if they need it. |
| Materials Needed | Please have the following materials for this course: a willingness to explore & take chances on learning. |
| | |
| | Franklin can help with any materials you may need as well. Please reach out to me privately and I will |
| | help you get what you need. |
| Course Resources | Here is a link to resources that are helpful to students during this course: my website & Canvas sites. |
| | My website is found by googling "Babers Math World" or at |
| | https://sites.google.com/site/babersmathworld/ |
| Empowering Families | The following are resources available for families to assist and support students through the course: |
| Linpowering runnines | Through my website & mailing to parents through Synergy. |
| | Through my website a maining to parents through synergy. |
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| | Section 7: Assessment of Progress and Achievement |
| | |
| Formative Assessments | As students move through the learning journey during specific units/topics, I will assess & |
| | communicate their <u>progress</u> in the following ways: By Formative assessment in the form of quizzes, |
| | journal checks and exit tickets. The hope in only giving 10% of the grade on Formative is that students |
| | use them to understand their thinking and progress in learning topics. |
| | |



| Summative Assessments | As we complete specific units/topics I will provide the following types of opportunities for students t provide evidence of their <u>learned</u> abilities: Summative assessments at the end of a unit with opportunity for students to revisit there work if they are not there "YET" | | | |
|-----------------------|--|--|--|--|
| Student Role in | Students and I will partner to determine how they can demonstrate their abilities in the following | | | |
| Assessment | ways:By being responsible for their learning prior to Summative tests and using tutorial and after | | | |
| | school time to get any needed help we can not fit into class. | | | |
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| Section 8: Grades | | | | |
| | Section 8: Grades | | | |
| | Section 8: Grades Progress Report Cards & Final Report Cards | | | |
| Accessing Grades | | | | |
| Accessing Grades | Progress Report Cards & Final Report Cards | | | |



| Progress Reports | I will communicate the following marks on a progress report: | | | | |
|-----------------------------------|--|-------------------|-----------------|------------|--|
| | Students will earn a grade on quizzes, projects, and tests in Canvas & class. Grades will be assessed both Formatively (daily Module Quizzes) and Summatively (End of Module tests & Projects). The journal and textbook which includes all assignments & notes, will be used to help in taking quizzes and assessments. Formative Assessments are designed to inform students on their progress towards showing understanding of standards and will be 10% of the grade. Summative Assessments are designed to evaluate understanding of standards for each Module and are 90% of grade. | | | | |
| | | | | | |
| | Grade explanation: | Midterm | Points in | Final | |
| | | Mark | Synergy | Grade | |
| | Advanced understanding of standards: Highly Proficient | HP | 4 - 3.5 | А | |
| | Proficient understanding of standards: Proficient | PR | 3.49 - 3 | В | |
| | Some understanding of standards, but NOT YET Proficient: Close to Proficient | СР | 2.99 – 2 | С | |
| | Does NOT YET understand or standards: Developing Proficiency | DP | 1.99 - 1 | D/F | |
| | NOTE: All learning targets or standards that are NOT YET will need to be | e revisited to ea | arn Proficiency | or better. | |
| Final Report Card Grades | Same is midterm information with letter grade from the table. | | | | |
| | I use this system for the following reasons/each of these grade marks mean the following: I use a | | | | |
| | system that has less values between grades to allow for a more authentic use of averages. Proficiency | | | | |
| | grading allows students to show how they develop their understanding on the path to success on a concept. | | | | |
| Other Needed info (if applicable) | | | | | |
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