

High School Algebra 2

Course Title: Algebra 2
Teacher: Riley Germanis
Room: 307 Decatur High School

Email: rgermani@fwps.org
Phone: (253) 945-5249
Website: <http://mr.germanis.org>

Essential Questions

- Which function best models a mathematical phenomenon in the real world? How do we measure best?
- How do we “solve” an equation, what does this mean and where will we run into challenges?
- What is an inverse function? How can we use them to answer practical application questions?
- When functions are shifted, how does this affect the mathematical model?

Course Description

Algebra 2 is a year-long course in algebra. We will explore different types of mathematical functions and how to solve linear, quadratic, polynomial, exponential and inverse functions. Our main goal will be to become fluent in the visual, algebraic and applications of each of these types of functions. This course aligns with the national Common Core State Standards, we will use diverse mathematical applications to introduce, connect and extend understanding of course concepts. Problem solving, writing, use of instructional technology and group activities will be used help students expand understanding and communicate algebraic concepts.

Grading Scale

Assignments, assessments, projects, etc. are used to measure proficiency with each standard using the following 4-point scale: 1 = beginning, 2 = approaching, 3 = meeting, 4 = excelling. **1 and 2 are not meeting standard & 3 and 4 are meeting standard.** Students and parents can check grades regularly online at <https://grades.fwps.org>. Final grades are determined by taking the mean (arithmetic average) for each priority standard and then the mean of the standard scores. Barring unusual circumstances, the following table guides the quarter and semester grade decisions:

Letter	Standard Average	Description
A	3.5 – 4.0	Excelling at most standards
B	3.0 – 2.4 $\bar{9}$	Meeting or excelling most standards
C	2.3 – 2.9 $\bar{9}$	Meeting or excelling some priority standards
F	0.0 – 2.2 $\bar{9}$	Approaching or beginning a majority of standards

Priority Standards & Homework

A list of current Algebra 2 Standards can be found on the district website <http://tinyurl.com/Alg2Standards>. Assessments, Assignments, tests, projects, labs, and quizzes, etc. are used to measure a student's current proficiency with 1 or more priority standards. Each standard will be scored based on a 4-point scale: 1 = beginning, 2 = approaching, 3 = meeting, and 4 = excelling. The district grade book will compute the average of all assessed scores to provide a final grade. For example, students who score 2, 3, 3, 4 for a priority standard will be issued an average of 3.0 and will be awarded a B for their final grade. Priority standards are considered summative assessments and contribute towards the student's final grade.

Other assignments, classwork, homework, participation etc. are considered formative. Formative assessments are designed to provide feedback, but do not impact student final grades. This is intended to provide speedy feedback to students as they prepare for priority standards. Students are expected to practice through homework & classwork.

Required Material

Please acquire as many of the following supplies as soon as possible. Spiral notebooks are discouraged. Extra supplies are available from Mr. Germanis as needed. Please contact promptly if needed.

- **1 inch three ring binder with dividers for homework and classwork**
- Several pencils with extra led AND ballpoint pens AND an eraser.

While optional, it is *highly recommended* that you have a **scientific or graphing calculator** (TI-83+ or TI-84+ preferred) and basic drawing supplies (i.e. **ruler** with cm markings, **compass** and **protractor**). Students who chose to use their cell phone as a calculator must use Desmos.com or the Desmos app to do computations. Cell phones are NOT allowed on tests and quizzes.

Attendance Policy

Students who attend class regularly and participate actively are more likely to find success in the class. The school and district policy will be followed for attendance. Students are responsible for any classwork, homework, assignments, projects, tests and quizzes missed from class. It is the **student's responsibility** to understand what was missed and complete the work within a reasonable time period. Students who miss tests or quizzes are expected to complete the assessment immediately upon returning to school. Please communicate with Mr. Germanis for exceptions to this rule.

Technology Policy

Educational technology can greatly increase student learning. However, the improper use of technology during class can be detrimental to student understanding. All mobile devices should be away and off; students will be given an opportunity to surrender their phone if it becomes a distraction to learning. Student use of technology must be teacher approved.

Classroom Expectations

Our class time is essential for learning new materials and working with one another. Please adhere to the following guidelines to optimize our class time together.

1. Be on time.
2. Prepare all materials for class.
3. Actively participate.
4. Respect the community.

Assignments Expectations

In this class, reasoning and explanation are valuable, for this reason, papers with only answers, don't communicate your full understanding. It is best to complete homework and classwork as soon as possible after being assigned. While it is not required to complete every assignment to find success in this class, students who participate more frequently usually retain the most information. Assignments will be regularly recorded into the grade book as a way to provide students feedback and track progress. It is beneficial to complete all assignments to your best ability; we will review homework questions soon after they're assigned. Please note, an excused absence does not excuse students from the learning. Keep up to date with classwork at <http://mr.germanis.org>. Every student has a Gmail account through FWPS, please see the district site about how to log in (<http://www.fwps.org/Page/2281>). Information will be emailed to students periodically.

Assessment & Reassessment Policy

It is important for all students to have an equitable setting. Standing up, using a cell phone, texting and talking to another student or looking at another person's paper during an assessment are inequitable test taking practices and will not be graded. Academic honesty is a strong value that is appreciated. Cheating and other related transgressions are serious! You can be held responsible for knowing of others who are engaging in academic dishonesty. Students found responsible for cheating will follow the school and district policy.

Students will be provided several opportunities to demonstrate understanding throughout a unit on quizzes. Since these are formative, they cannot be retaken. End of unit tests are the final opportunity to demonstrate

mastery. Because of this, standards on the unit test will be allowed to reassess. While the same standard will be assessed, the student will not receive the same test. This is to ensure the security of each assessment and equity in assessing student understanding. Before you can retake, you must have all of the assignments complete and recorded from the current unit. Please come prepared the first time you take the assessment to avoid having to retake. When retaking assessments, you must retake the **WHOLE STANDARD**. *** Note: You may not retake an assessment or turn in late work in the last two weeks of a grading period.

Gradebook Entry

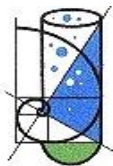
Grades for each standard will be the mean average (add up the scores, then divide by the number of attempts) of quizzes, tests, exams and projects. The overall class grade will be the mean average of all standards. This means that every attempt at a grade counts towards your understanding. You will have at minimum 3 opportunities to demonstrate understanding of a standard. For this reason, quiz retakes are not available.

- Mid-Unit Quiz (*no retakes or makeups, not available for all standards*)
- Special Project (*only available for some units and standards*).
- Unit Test
- Unit Test Reassessment (*on student's own time, less than 2 weeks after test return*)
- Final Exam

All assessments count, grades will be “replaced” or deleted. Missing a quiz will eliminate an opportunity to demonstrate understanding. Missing a Unit Test, Final Exam or Project will result in the lowest possible score in the gradebook. This will be signified by a “SK” or “Skipped Assessment” in the gradebook.

Non-Discrimination & Equity

Federal Way Public Schools, Decatur High School, Mr. Germanis, and all students, will not discriminate or prejudice or harass others in any activity on the basis of race, color, national origin or ethnicity, religion, creed, age, sex or gender, sexual orientation, gender expression or identity, marital or family status, veteran or military status, disability, or the use of a trained dog guide or service animal. All students have an equitable right to learn in a safe, inclusive classroom. If you believe these policies have been violated, contact the appropriate coordinator: Civil Rights Compliance (compliance@fwps.org), Title IX Coordinator (titleix@fwps.org), 504/ADA (504@fwps.org), or call (253) 945-2000.



KSTF

Knowles Science Teaching Foundation

Phone: 856.608.0001

Fax: 856.608.0008

Web: www.kstf.org

Dear Parent/Guardian,

September 7, 2017

I am your child's math teacher at Decatur High School in Federal Way, WA, and I am a Knowles Science Teaching Foundation ("KSTF") Fellow. KSTF Fellows are a national group of high school math and science teachers who are working together to become the best teachers they can possibly be. To learn more about the program, see KSTF's website at <http://www.kstf.org/>.

Throughout the year, Fellows may take photographs and/or collect audio or video samples of their classroom teaching. KSTF Fellows study these photographs and recordings and talk about them with KSTF staff and other Fellows. The purpose of this work is to help Fellows learn about math and science teaching.

With your written permission, I would like to share photographs and audio or video recordings of my classroom that may include your child's name, image, or voice at KSTF. I will only share these photographs and audio/video recordings with KSTF teaching specialists, KSTF staff, and other KSTF Fellows.

Although I hope that you will give written permission to help me during this school year as I work on my teaching, I certainly will accept and respect your decision if you choose not to give consent. Whether or not you give your consent, your child will benefit from what I learn. But I do respectfully ask for your written permission to this request by signing and returning to me the attached Consent Form with your student's class syllabus.

If you have any questions, please feel free to contact me or Jodie Galosy, Director of Research and Evaluation at the Knowles Science Teaching Foundation (jodie.galosy@kstf.org; 856-840-8250).

Thank You,
Riley Germanis
Mathematics Teacher
Decatur High School

CONSENT FORM

FOR FULL PARTICIPATION IN A KNOWLES SCIENCE TEACHING FOUNDATION (“KSTF”) FELLOW’S CLASSROOM

In regards to KSTF Fellow Riley Germanis at Decatur High School in Federal Way, WA

TO: KSTF

I am the parent or legal guardian of the student named above. I have read the letter from my child’s teacher, named above, who is a KSTF Fellow. The letter tells me about that teacher’s plans to photograph and/or make audio recordings and/or video recordings of students in the class at the school named above. The purposes of these photographs, audio recordings or video recordings is for the teacher’s development as part of his KSTF fellowship. I hereby consent that any photographs, audio recordings, or video recordings that teacher makes in which my child may be seen or heard can be shared with KSTF teaching specialists, KSTF staff, and other KSTF Fellows for teacher development purposes.

Please select one: I do consent I do not consent

Consent For (Student's Name): _____ Period: _____

Student Signature: _____ Date: _____

Parent/Guardian Name (printed): _____

Parent/Guardian Signature: _____ Date: _____

If you have any questions or concerns about this Consent or the KSTF program in general, please contact Jodie Galosy, Director of Research and Evaluation, Knowles Science Teaching Foundation (jodie.galosy@kstf.org; 856-840-8250).

Please check each section have reviewed in this packet to indicate that you have read and understand each class expectation. This must be signed by both you and your parent/guardian and returned:

- | | |
|---|--|
| <input type="checkbox"/> Course Syllabus (first page) | <input type="checkbox"/> Assignments Policy |
| <input type="checkbox"/> Grading Scale | <input type="checkbox"/> Assessment Policy |
| <input type="checkbox"/> Required Material | <input type="checkbox"/> KSTF Consent Form |
| <input type="checkbox"/> Attendance Policy | <input type="checkbox"/> I have visited mr.germanis.org |
| <input type="checkbox"/> Classroom Expectations | |

Preferred Phone Number: _____

Preferred Email: _____

Preferred method of contact (circle one): Phone Email Other: _____