

## ALGEBRA II COURSE SYLLABUS 2019-20

| Course Name <br> Reference Text | Algebra II <br> Holt, Rinehart and Winston, Fifth Edition |
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| Instructor | Maneesha Mankad |
| Contact | mankadm@aaps.k12.mi.us (Best way to contact me) |
| Website <br> Google Classroom Code | www.mathinspires.weebly.com <br> grw360 |
| Meeting Times | Block 2, Block 6 on Tue, Thu, Fri - Room 320 <br> Block 7 on Mon, Wed, Fri - Room 320 |
| Additional Support | Math Support: Block 1 (Moe), Block 3 (Ed), Block 7 (Anne) <br> Maneesha's Office Hours: Thu - 2:00-3:00pm, Room 320 |

Greetings! I am so excited to contribute towards the goals of Community High School through my passion for teaching and motivating youth. I have a Master's degree in Statistics from Ohio State University (Go Bucks!) and another Master's in Secondary Mathematics Education from University of Southern California (Fight On!). I enjoy theater, music, traveling, reading and spending time with my family.

I am deeply committed to the individual success of each and every student in my classroom. I believe we can achieve this by creating a community of learners that actively participate and contribute, do quality work and support each other by creating a positive, respectful, inclusive and safe environment. Communication is the key to building a partnership between home and school that will help me meet the needs of all my students.

Please read this document in its entirety. Please provide your contact information and acknowledge that you have read the syllabus by completing the survey "Algebra II Syllabus and Contact Information Survey" in google classroom (Class Code: grw630) to indicate that we have an understanding and commitment towards the success of each individual in this classroom.

Standards of Mathematical Practice - These will be emphasized consistently and infused throughout every lesson.

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

## Teacher Expectations and Classroom Procedures

## Classroom Conduct

The emphasis in this class is on caring. Caring about yourself, your classmates and your learning by making the most of each lesson and assignment. Caring leads to our community of learners interacting with each other in the classroom with respect and courtesy. Whatever takes place in the classroom will be for the purpose of helping you or your classmates progress further down the road to understanding and mastering the subject. Be an asset to yourself and others, not a liability. Private, irrelevant conversations during instruction time and off-task behavior does not help you or your grade and is very distracting to the rest of us, so avoid them at all costs.

Students should attend every class session ready to learn and work. Be prepared to tackle the warm-up on the screen when you enter the classroom. Once class starts, I expect private conversations to cease. You will soon discover that missing one day can put you at a real disadvantage because of the brisk pace of the course and since the material builds upon itself. Consequently, active participation in class is expected, which includes both speaking up and listening. Give class your full attention while here. Complete all assignments in a timely fashion

Entering and Leaving the Classroom: Students are not allowed to leave the room during whole group instruction, group work and during quizzes and tests. Everyone should be prepared to start promptly, and remain until the end of class. If you need to leave early, for a verified reason, please let me know ahead of time, and try to do so with minimal distraction to others.

Attendance: Regular, daily attendance is critical for success in this class.

- Unverified Absences/Tardies

Warm Ups, Quizzes and Unit Tests may not be made up.

- Verified Absences:

Scheduling make-ups is the student's responsibility
$>$ Quizzes: Need to be made up before the next class meeting.
> Unit Tests: Need to be made up within 3 days. Students absent for the test on the original date will not have the multiple-choice section. The whole test will be free response.

Absences: Requirement for all absences verified or unverified

- Please print a copy of the assignment that you missed in class from Google Classroom.
- Please watch the video for the lesson (link on Google Classroom) and read the section of the book.
- Write down notes and questions you have and come for help during Math Support or make an appointment during my office hours.


## Recommended Materials (Please see the Deans or Counselors if needed)

Students should come to class prepared daily with the following:

- A three-ring binder with dividers for quick access to the following: Class Assignments (these also serve as guided notes), Homework, Handouts for reference materials and Quizzes and Tests. Students will receive credit for maintaining well-organized binders at the end of each unit and are expected to keep all materials in the binder till quarter end.
- Use of Graphing Calculator: Students are responsible for their own graphing calculators (TI -84 Plus, TI - 84 Plus Silver Edition, TI 84 Plus CE recommended) and may sign one out from the main office if needed. I have a few graphing calculators in class that students may borrow during class in exchange for their student ID. The graphing calculator will be used regularly in class as a learning tool so that students can make calculations using tedious numbers, support their work graphically, make conjectures regarding the behavior of functions among other topics thus allowing students to view problems in a variety of ways. The calculator helps students develop a visual understanding of the material.

Multiple Approaches: Throughout the course, students are required to use multiple approaches to the understanding of functions. Students will create graphs both with the calculator and by hand to assist in the understanding of problems. Students will use the graphing calculator to experimentally determine solutions to problems and to interpret the results. Students will also learn to use the calculator to support answers and conclusions that they have developed analytically.

## Cell Phones and Other Technology

Technology will be used in the classroom for educational purposes only. Please note, cell phones will NOT be allowed in place of graphing calculators. Cell Phones are not allowed on any testing (standardized or otherwise), therefore it is imperative that students learn to use their own graphing calculators effectively to maximize their own learning and make use of time efficiently on testing.

Students will be asked to turn off and put away all technology during class time. Students will lose the privilege to use technology in class if they cannot use it responsibly.

Grading Scale (Semester: Quarter 1-40\%, Quarter 2-40\%, Final - 20\%)
CLASSWORK ( $20 \%$ of quarter grade. Should be completed on the day assigned. Due on Quiz and Test days)
Daily Warm Up: At the beginning of each period, students are given warm up questions to complete. These questions may be review or a lead-in to the lesson. Differing methods of solution are shared and discussed.

In Class Assignments: Block scheduling allows for time to learn a new concept as well as working on challenging problems with peer and teacher support. We greatly value class time and have created these assignments to serve as guided notes and practice problems. It is essential that students utilize their time in class efficiently and complete this assignment.

Group Competency- Test Review: In each unit I set aside time for review through an assignment called the Group Competency. This assignment is like a practice test that gives students an opportunity to practice problems like the ones on the test with peer support. Student questions regarding lack of understanding should be answered as soon as they arise, not waiting until the day of the group competency. Additionally, office hours are crowded before test days, meaning, I will possibly be unable to work with you exclusively if at all, as my attention is divided.

## HOMEWORK ( $10 \%$ of quarter grade. HW is due in the next class):

Complete Homework Daily. Homework problems will be assigned with every lesson and are due in the next class. Homework is due at the beginning of class without exceptions. Students will not be allowed to "finish" their homework in class. Homework will be graded for completion and presentation only. Occasionally students will be asked to present their work to the class. Students with questions from the previous assignment might have their questions answered by fellow "expert" students. These "experts" will present the problems in a step-by-step manner and verbally explain the sequence and the rationale. This usually leads to great peer discussion about alternate representations and approaches to a particular problem.

To receive full credit, clearly label assignment number, book section, page and problems. Write out the problem unless it is a word problem, in which case write out key information. Show all your work to earn credit.

CW/HW Rubric: 5 Points: Completed assignments, problems written out, corrections shown in ink.
4 Points: Fully completed assignment, problems written out, and corrections missing.
3 Points: Partially incomplete assignment, problems not written out or late work.
1-2 Points: Incomplete assignment, work missing, problems not written out.

## Class Website: www.mathinspires.weebly.com

Google Classroom Code: grw630

## Mid Unit Quizzes \& Unit Tests: (70\% of quarter grade)

At the end of each unit, a unit test will be given. All material on the test will be based on the assigned homework, classwork, and review given prior to the test date.
Quizzes and Unit Tests cannot be made up for unverified absences. Scheduling make-ups is the student's responsibility and the make-up must be completed within a week.

Quizzes will be given mid-chapter and a unit test at the end of every unit. Students who miss a quiz due to an excused absence or excused tardy must make up the quiz before the following class meeting. Students whose absence or tardiness is unexcused, or do not take the makeup promptly, will not be able to make up the quiz. All exams and quizzes will be closed book/notes. Students who are absent the day of a test will take the makeup in the following 3 days (not during class). Students absent for the test on the original date will not have the multiple-choice section. These questions will now be free response. Students who are absent the class before a test will still take the test on the regularly scheduled day.

## Test Corrections and Additional Credit

Test Corrections will be a required assignment for every Unit Test. A student may earn up to a " C " if test corrections are completed as specified to improve their grade.

## Final Exam: ( $\mathbf{2 0 \%}$ of semester grade)

The final exam is intended to recap the major concepts covered throughout the entire course. We will spend time reviewing for these exams as they get near.

## Study Group (Math Buddies)

I encourage students to keep the phone number of two classmates on hand for assistance on their homework.

University research indicates that math students who worked regularly with a study group performed at a significantly higher level than those who did not. Study groups are an excellent way to get help and to reinforce what you know. But be warned: Copying does not equal Collaboration. You may learn in groups, but you will take assessments on your own.

## Late/Missing Work

- Students will be required to fill in a Late/Incomplete assignment for any missing Unit Group Competency, and Project.
- If a student starts to fall behind in class, parents and the forum leader will be contacted and the student will be expected to attend Math Support till they get caught up.
- Late credit will be awarded beyond the due date and no late work will be accepted after the Unit Test.


## Academic Integrity \& Honesty

Any quiz, test, project or other classwork turned in under your name, should be your own original work. Passing off someone else's work as your own represents intellectual fraud and theft, and violates the core values of our academic community. To be honorable, you should understand not only what counts as academic dishonesty, but also how to avoid engaging in these practices. You should:

- attribute all ideas taken from other sources; this shows respect for other scholars. Plagiarism can include portraying another's work or ideas as your own, buying a paper online and turning it in as if it were your own work, or not citing or improperly citing references on a reference page or within the text of a paper.
- not falsify or create data and resources or alter a graded work without the prior consent of your teacher. This includes making up a reference for a works cited page or making up statistics or facts for academic work.
- not allow another student to do your work/exam/quiz or submit the same or similar work in more than one course without permission from the course teacher. Cheating also includes taking an exam/quiz for another person, looking on another person's exam/quiz for answers, using exams/quizzes from previous classes without
permission, or bringing and using unauthorized notes or resources (i.e., electronic, written, or otherwise) during an exam/quiz.
- not facilitate cheating, which can happen when you help another student complete a take-home exam/quiz/assignment, give answers to an exam/quiz, talk about an exam/quiz with a student who has not taken it, or collaborate with others on work that is supposed to be completed independently.
- be truthful about the submission of work, which includes the time of submission and the place of submission (e.g., e-mail, online, in a mailbox, to an office, etc.

> It is imperative that students understand that academic honesty is expected on all assignments*. Students will receive a "zero" if caught cheating on an assignment, quiz or test.
> Consequences for Cheating, Plagiarism, including collusion, can also result in Level 1 or 2 behavior consequences as outlined in the 2015-16 Student Rights \& Responsibilities Guide: http://www.a2schools.org/Page/7363

I believe that working together as a team (students, teachers and family members) will ensure the success of students in Algebra II. This will be a rigorous course, but you will succeed if you work hard and actively participate in class. I expect the best from each and every one of you, and in return, you can expect my best efforts in providing instruction, support, and encouragement to ensure your success and having a positive learning experience in mathematics. The habits of mind and the required daily discipline developed in learning math are skills that transcend math and the classroom. These are valuable skills that will stay with you the rest of your lives and will help you be successful in many of your future endeavors. You are exceptional, and I know you are destined to do great things.

I look forward to working with you this year!
Maneesha Mankad

## Overview of Algebra II

## 1. Functions, Linear Functions \& Linear Systems

2. Quadratic Functions
3. Polynomial Functions
4. Exponential and Logarithmic Functions
5. Rational \& Radical Functions
6. Probability and Statistics
7. Sequences and Series
8. Trigonometric Functions
9. Trigonometric Graphs and Identities

## 10. Conic Sections

