



# West Potomac High School

## Algebra 2 Syllabus

2015-2016

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### Course Overview

This course is designed for students who have successfully completed the Algebra 1 standards. The Algebra 2 course provides a thorough treatment of advanced algebraic concepts through the study of functions, polynomials, radical and rational expressions, complex numbers, and data analysis. Emphasis is placed on the mechanics of algebra with real-life applications and modeling. A transformational approach to graphing is used with families of related graphs. Numerical, graphical and algebraic solutions should be considered for all problems where appropriate. Graphing calculators are used throughout the course. This course provides comprehensive coverage of the Virginia's Algebra 2 Standards of Learning.

### Course Outline

There are 12 units of study in the course that emphasize content and analytical skills in equal measure. There is a period of review and preparation for the SOL test and end of the year activities. Students receive a calendar for each unit. Electronic copies of all course and class handouts as well as assignments are posted on the course Blackboard site.

Unit #	Topic	Unit #	Topic
1	<b>Introduction to Functions</b>	7	<b>Rational</b> Expressions, Equations, and Functions
2	<b>Linear and Absolute Value</b> Expressions, Equations, and Functions	8	<b>Applications of Rational Functions: Variation</b>
3	<b>Quadratic</b> Expressions, Equations, and Functions	9	<b>Exponential and Logarithmic</b> Expressions, Equations and Functions
4	<b>Systems and Applications of Quadratics</b>	10	<b>Statistics</b>
5	<b>Polynomial</b> Expressions, Equations, and Functions	11	<b>Sequences and Series, and Variation</b>
6	<b>Radical</b> Expressions, Equations, and Functions	12	<b>SOL Review</b>

### Course Textbook

Each student will have access to a Pearson's *Algebra 2* textbook. Hard copy textbooks or online access are available upon request from student. The cost to replace a lost and/or damaged book is \$81.00.

### Supplies

Students are requested to have the following items in class on a daily basis:

- |                  |  |                 |
|------------------|--|-----------------|
| Binder           | Paper  | Pencils/Erasers |
| 3-pronged Folder | <i>Graphing Calculator</i> (may be kept at home for security purposes) |                 |

If you have any concerns about acquiring these supplies, please speak to the course instructor, so that arrangements can be made to support your learning in the course.

## **Assessment & Grading**

The focus of assessment is to provide feedback on a students' learning process and to measure students' level of performance. Information generated through assessments is used by the teacher and students to reflect and then make adjustments in the learning process that increase student learning over time.

**Second Chance Assessment:** Due to the importance of sustained learning, a separate document thoroughly explaining the procedures for student eligibility to retake particular summative assessments will be handed out in class.

### **SOL End of Course Exam**

All student enrolled in Algebra 2 will take the SOL exam. You can expect the exam to be scheduled in the last weeks of May or early June. Students need to pass the SOL to receive verified credit for the course. Please forward all questions regarding graduation requirements to your student's counselor.

- **Final Course Grade:** Final course grades will be an average of the four quarter grades and final exam. Each quarter grade will count as 22% and the final exam will count 12% of the final grade. The Final Exam grade will be determined by a cumulative exam given during the scheduled exam period in June. Quarter Grades will be determined by the following weights and categories:

Summative Assessments (includes unit tests and major projects): 65%

Diagnostic Assessments and Quizzes: 25%

In and Out of Class Assignments: 10%

- **Late and Make Up Work:** We acknowledge that students will sometimes need flexibility to meet deadlines as a result of unforeseen emergencies. Therefore, assignments are accepted without penalty after assigned due dates following these guidelines:

- One class period of absence affords one class period of make-up opportunity.
- If you are absent **ONLY** on the day of a test, be prepared to take the test when you return to class.
- If you are absent only on the class period **BEFORE** an announced assessment, you must take it as scheduled.
- It is the **STUDENT'S RESPONSIBILITY** to make up all missed work. Make arrangements with your teacher to make up work and/or tests/quizzes.

- **Intervention:** For students seeking extra help or remediation, teachers will be available to meet with students various times outside of class. If a student earns a D or an F at an interim or quarter, or needs to complete test corrections, it is strongly recommended that he/she utilize the following intervention opportunities until their performance has improved.

- **After School Hours:** Various Algebra 2 teachers will be available to work with students or provide them with time to make up assessments. WPHS provides late buses on Mondays and Thursdays.
- **Wolverine Time:** *Daily, before 3<sup>rd</sup> period.* Students can meet with their Algebra 2 teacher for support or enrichment after scheduling and receiving a pass to report to their math classroom.
- **Peer Tutoring:** *By appointment.* The National Honor Society and the Math Team offer tutoring services for fellow students. Contact your student's math teacher for further details.

## **Communication**

If you wish to view your student's grades throughout the year, please log in to Parent View. Teachers will update grades periodically throughout the quarters. Questions regarding the course or the student's progress submitted via email will be returned within 2 school days of receipt.

## **Honor Code/Academic Integrity**

There will be absolutely no tolerance for cheating in any form. Cheating is giving or receiving unauthorized aid on any assignment. Students will still be expected to complete the assigned work, or its equivalent, to demonstrate mastery of the skill or knowledge the original assignment is intended to measure. Should an instance of suspected cheating occur, teachers will follow the procedure indicated in the West Potomac High School Honor Code.

**West Potomac High School**  
**Algebra 2 Syllabus:**  
**Student Signature & Information Sheet**  
2015-2016

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I have read the expectations and classroom procedures described in the Algebra II syllabus. Throughout the year I agree to follow and support them.

Name (printed): \_\_\_\_\_ Signature: \_\_\_\_\_

Student's e-mail address: \_\_\_\_\_ Date: \_\_\_\_\_

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**Please respond to the following questions.**

Describe your experience in math class last year: \_\_\_\_\_

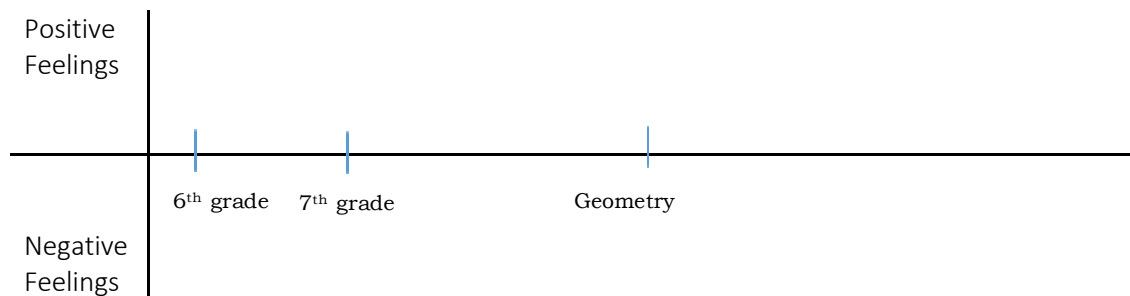
What helps you learn well in math? (ex: sitting in the front, reminders to do homework, etc)

Do you have or participate in any extracurricular activities or jobs? If so, what are they?

What type of learner would you consider yourself? (ex: visual, active, audio, etc)

What is something unique about yourself?

Timeline: Describe your feelings about math across time by drawing a line graph.



**West Potomac High School**  
**Algebra 2 Syllabus:**  
**Parent/Guardian Signature & Information Sheet**  
2015-2016

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I have read the expectations and classroom procedures described in the Algebra II syllabus. Throughout the year I agree to follow and support them.

Name (printed): \_\_\_\_\_

Relationship to student: \_\_\_\_\_

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

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**Please provide the following information.**

Parent/guardian's e-mail address: \_\_\_\_\_

Best phone number you can be reached at: \_\_\_\_\_

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**Please respond to the following questions.**

Describe your son/daughter's personality and learning style.

Is there any additional information that the instructor should know about your student in this course?