Teacher Contact Information

Teacher:  Janice Lauffer

E-mail address:  jtlaufer@fcps.edu  Phone Number:  703-219-4044

BlackBoard/FCPS 24-7 Learning (http://fcps.blackboard.com): All calendars, assignments, reminders, links to helpful websites, and contact information will be on this website. Parents can now have their own account with FCPS 24-7 which allows them to view their student’s learning account. To get an FCPS 24-7 account, please complete the online registration as follows:

- Using your Internet browser, go to http://fcps.blackboard.com
- Log on using username: parentreg and password: newuser
- Under the Parent Portal Registration heading, select Click here.
- Fill out the online form and follow the prompts.

At the end of the process, print or write down your unique registration key.

Course Description  Algebra 2 provides a thorough treatment of algebraic concepts through the study of functions, polynomials, rational expressions, complex numbers, exponential and logarithmic equations, matrices, arithmetic and geometric sequences and series, data analysis, and financial literacy. 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 as appropriate. Graphing utilities, especially graphing calculators, are integral to the course. The course content is aligned with the Fairfax County Public School’s Program of Studies (POS) and the Virginia Standards of Learning (SOL). The Algebra 2 SOL test will be administered in May.

Course Objectives  The following outline may change and units may shift through quarters.

<table>
<thead>
<tr>
<th>First Quarter</th>
<th>Second Quarter</th>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
</tr>
</thead>
</table>
| **Unit 1:** Functions  
- The student will understand and apply the characteristics of functions.  
**Unit 2:** Factoring and Quadratic Functions (part 1)  
- The student will factor polynomials, simplify radicals, and perform operations on complex numbers  
**Unit 3:** Applications of Quadratics  
- The student will apply properties of quadratic equations to solve systems, perform regression and apply to real-life situations.  
**Unit 4:** Exponents and Radicals  
- The student will apply the laws of exponents to simplify expressions and solve equations.  |  
**Unit 2:** Factoring and Quadratic Functions (part 2)  
- The student will graph and solve quadratic equations over the complex number system.  |  
**Unit 5:** Polynomials Expressions and Functions  
- The student will graph and solve polynomial functions.  |  
**Unit 8:** Statistics  
- The student will use the normal distribution to calculate probabilities as well as compute and distinguish between permutations and combinations.  |  
**Unit 6:** Rational Expressions and Functions  
- The student will perform mathematical operations on rational expressions and equations.  |  
**Unit 9:** Sequences and Series  
- The students will investigate and apply the properties of arithmetic and geometric sequences and series.  |  
**Unit 7:** Exponential and Logarithmic Functions  
- The student will graph and solve exponential and logarithmic functions.  |
Textbook  All Algebra 2 textbooks in Fairfax County are online as of this school year. A link to the textbook is available in your student’s FCPS 24-7 account to allow easier access to the login page of the textbook. Look for a button on the left column of the 24-7 page titled “Online Textbook.” Your student will be provided instruction in class on how to access the online textbook. For additional information on FCPS stance and policy regarding online textbooks, please use the following link:  http://www.fcps.edu/is/textbooks/onlinetextbooks/index.shtml

Materials  You will be responsible for bringing the following items to every class:
  • No. 2 Pencils with erasers
  • Loose Leaf Paper
  • Graph paper
  • Red pen
  • 6-inch ruler
  • Passport Book
  • Any TI-83 or TI-84 Calculator*
  • 4 AAA Batteries
  • Low Odor Dry Erase Markers

*Students should purchase their own calculator. A limited number of calculators may be borrowed from the school.

Grading Policy

Quarter Grades: Each quarter grade will be determined by the following criteria:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>60%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>30%</td>
</tr>
<tr>
<td>Classwork / Homework / Participation</td>
<td>10%</td>
</tr>
</tbody>
</table>

Homework will be assigned daily and be due the following class period. Homework is graded on completion. Full credit may be given when the homework is turned in on the due date. Homework submitted after the due date and prior to taking the Unit Test may earn partial credit. Your success in this course will be based on doing daily classwork (including warm-ups) and homework assignments completely every day. Fairfax High School celebrates the Winter Break as family time that is homework free time. No homework will be assigned over the break.

Teachers will approach students who have not achieved mastery on a unit test and who are eligible to retake a test. The students will only be able to retake the test after completing necessary remediation. The test grade will be replaced with the new grade but capped at 70%.

Quiz grades may be replaced by a student's test grade when mastery has been shown.

Any quiz or test may include learning targets taught in previous units.

Excused Absences: If you are excused absent on a class day, you have the sole responsibility to find out what was missed, to complete missed assignments and to make arrangements for taking missed quizzes/tests. After an absence, the student is responsible for making arrangements with the teacher to turn in any missed assignments. If you are absent ONLY on the day of a test, be prepared to take the test on the day of your return to class. Missed work will be recorded as a ZERO until the work is made up. That zero will be used to compute interim or quarter grades if the work is still pending makeup at the time those grades are exported.

Unexcused Absences: If you are unexcused absent from class, you have the sole responsibility to make up all quizzes, tests and other written assignments. You must make up missed work before the next class period. For missed work due to an unexcused absence, students may only receive 65% of the earned grade. Other classroom activities cannot be made up.

Midterm and Final Exams: The midterm exam and final exam will be cumulative assessments. Each is worth 10% of the final grade as outlined below. If students earn a Pass Proficient score on their SOL test, 5% will be added to their final exam score. If students earn a Pass Advanced score, 10% will be added.

Final Year Grade: The final year grade will be determined as follows:

<table>
<thead>
<tr>
<th>Quarter / Exam</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st quarter grade</td>
<td>15%</td>
</tr>
<tr>
<td>2nd quarter grade</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>10%</td>
</tr>
<tr>
<td>3rd quarter grade</td>
<td>25%</td>
</tr>
<tr>
<td>4th quarter grade</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>10%</td>
</tr>
</tbody>
</table>
**Letter Grades:** Letter grades will be determined using the Fairfax County Public Schools grading scale.

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93 – 100</td>
<td>A</td>
</tr>
<tr>
<td>87 – 89</td>
<td>B+</td>
</tr>
<tr>
<td>83 – 86</td>
<td>B</td>
</tr>
<tr>
<td>77 – 79</td>
<td>C+</td>
</tr>
<tr>
<td>73 – 76</td>
<td>C</td>
</tr>
<tr>
<td>67 – 69</td>
<td>D+</td>
</tr>
<tr>
<td>64 – 66</td>
<td>D</td>
</tr>
<tr>
<td>below 64</td>
<td>F</td>
</tr>
<tr>
<td>90 – 92</td>
<td>A-</td>
</tr>
<tr>
<td>80 – 82</td>
<td>B-</td>
</tr>
<tr>
<td>70 – 72</td>
<td>C-</td>
</tr>
</tbody>
</table>

**Classroom Expectations**

**Attendance:** Reminder, two unexcused tardies equal one unexcused absence. Arriving 20 minutes late to class equals one unexcused absence. If you are absent on a regular class day:

1. Copy the notes/problems from a neighbor.
2. Attempt the homework assignment.
3. If you are having difficulty, please come in for extra help.

**Creative Classrooms:** A peer tutoring program, Creative Classrooms, will be available as an extra resource both during and after school for all students in SOL courses. More details concerning the program will be available from your teacher in coming weeks.

**Help:** If you are absent or need extra help outside of class, extra help is available after school and during IT. You need to arrange a time with the teacher(s) prior to the meeting. Please do not wait until the day before the test to get help. Come early and come often!! See the schedule of available after school times at the beginning of the syllabus.

**Honor Code Violation:** The first time a student breaks the honor code at FHS, the student must retake the assessment for a grade of no higher than 65%. The second time the student violates the code, the student will receive a zero on the assignment.

**The Four P’s:** Each student will be expected to follow the “FOUR P’s”:

1. **Be prompt.** In a class as sequential as algebra, any absences from class or any part of class disrupts the continuity of the learning process. If an absence is unavoidable, make every attempt to do the lesson and the homework before returning to class. See your assignment sheet for guidance on missed assignments. Poor attendance can adversely affect your grade. Class will begin promptly, so be on time and be ready to work as soon as the bell rings.

2. **Be prepared.** Make sure you have all supplies each day. Have your homework completed every day and be prepared to ask and answer questions regarding your homework. Students often find a direct correlation in the completion of daily assignments and their quiz/test grades and, of course, how much they actually learn. Just writing answers will not be accepted.

3. **Be polite.** This means using appropriate language, treating others the way you want to be treated, and respecting the property of the teachers, the school and other class members. Do not touch anything on or in the teachers’ desks. We do not lend out any materials needed for class. We will dismiss you when all materials have been collected and all announcements have been completed. No loitering by the door.

4. **Be productive.** Take notes. What may seem clear in class may not be so clear when you sit down to do your homework. You can refresh your memory by reviewing notes. Ask questions!! As we check over homework in class, be sure to make corrections on your homework. This will help you on your tests and quizzes.

**SOL Information:** There is a Virginia Standards of Learning (SOL) exam for this course. It will be given at the end of May typically (or possibly the beginning of June). It is scheduled by the State of Virginia and the testing coordinator at FHS. Practice tests will be given to the students in the spring before the test. More information about preparation materials will also be given out at that time and posted on BlackBoard.

**Electronics Policy:** Devices are to be silent and out of sight, unless the teacher gives students permission to use them. Failure to comply with the policy governing the use of electronic devices in classrooms during the school day may result in confiscation of the device.
Syllabus Agreement

We have read and understand the Algebra 2 course requirements and expectations.

____________________________   ____________________________
Student name (please print)  Parent name (please print)

____________________________   _________________________________
Student signature     Parent/Guardian signature

Best way to contact you during the school day: ______________________________________

Wireless Lab Agreement

These are the rules and expectations concerning the wireless laptops. Both the parent and student must sign the bottom before the student will be allowed to use the laptops.

1. Always handle with 2 hands, especially while transporting laptops.
2. No food or drink near the laptops (or in the classroom)
3. Do not remove/attach any devices to any laptops.
   1. Do not install any software on these laptops.
   2. These laptops are for instructional purposes only.
   3. Do not alter the settings in any way! This includes any desktop themes.
   4. Make sure the power is off when returning laptops.

It is a privilege to be able to use these laptops as part of the instructional process. Students will be held responsible for any negligent damage to a laptop while they are using it.

____________________________         ________________________________
Student signature      Parent/Guardian signature
Teacher Contact Information

Teacher: Julie Dietz  E-mail: JDDietz@fcps.edu  Voicemail: 703-219-4095

After-school Availability: Thursdays until 4:15. Other days by appointment only.

Blackboard/FCPS 24-7 Learning (http://fcps.blackboard.com): All calendars, assignments, reminders, links to helpful websites, and contact information will be on this website. It is very important that you use this resource to your advantage. You can never have an excuse that you forgot something. Be sure to check it regularly!!!!

Algebra 2 Honors Team

<table>
<thead>
<tr>
<th>Teacher</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>After School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie Dietz</td>
<td>C140</td>
<td>Planning</td>
<td>C140</td>
<td>PLC</td>
<td>C140</td>
<td>C140</td>
<td>C140</td>
<td>C140</td>
</tr>
<tr>
<td>Thresa O’Neill</td>
<td>D101</td>
<td>D101</td>
<td>IC Mtg</td>
<td>PLC</td>
<td>Planning</td>
<td>D101</td>
<td>D101</td>
<td>D101</td>
</tr>
</tbody>
</table>

Course Description: Algebra 2 provides a thorough treatment of algebraic concepts through the study of functions, polynomials, rational expressions, complex numbers, exponential and logarithmic equations, matrices, arithmetic and geometric sequences and series, and data analysis. Emphasis is placed on the mechanics of algebra with real world applications and modeling. A transformational approach to graphing is used with families of related graphs. Numerical, graphical, and algebraic solutions are considered for all problems as applicable. Graphing utilities, especially graphing calculators, are integral to the course.

The depth and level of understanding expected in Algebra II Honors is beyond the scope of Algebra II. Students are not only expected to master algebraic mechanics but to understand the underlying theory and to apply the concepts to real-world situations in a meaningful way. Additional topics in Algebra II Honors include parametric equations, complex conjugates, and matrices. Emphasis is on modeling, logic, and interpretation of results.

Course Objectives The following outline may change and units may shift through quarters.

<table>
<thead>
<tr>
<th>First Quarter</th>
<th>Second Quarter</th>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1: Functions</td>
<td>Unit 3: Applications of Quadratics</td>
<td>Unit 6: Rational Expressions &amp; Functions</td>
<td>Unit 9: Sequences &amp; Series</td>
</tr>
<tr>
<td>• The students will understand &amp; apply the characteristics of functions.</td>
<td>• The students will apply properties of quadratics to solve systems, perform regression, and apply to real-life situations.</td>
<td>• The student will perform mathematical operations on rational expressions &amp; equations. Students will graph &amp; solve rational functions.</td>
<td>• The student will investigate and apply the properties of arithmetic and geometric sequences and series.</td>
</tr>
<tr>
<td>Unit 2: Factoring &amp; Quadratic Functions</td>
<td>Unit 4: Polynomials, Expressions, &amp; Functions</td>
<td>Unit 7: Exponential &amp; Logarithmic Functions</td>
<td>Unit 10: Matrices</td>
</tr>
<tr>
<td>• The students will factor polynomials, graph and solve quadratic equations over the complex number system.</td>
<td>• The student will graph and solve polynomial functions.</td>
<td>• The student will graph and solve exponential &amp; logarithmic functions.</td>
<td>• The student will investigate and apply the properties of matrices.</td>
</tr>
<tr>
<td>Unit 5: Exponents &amp; Radicals</td>
<td></td>
<td>Unit 8: Statistics</td>
<td></td>
</tr>
<tr>
<td>• The students will apply the laws of exponents to simplify &amp; solve</td>
<td></td>
<td>• The student will use the normal distribution to calculate probabilities as well as compute and distinguish between permutations &amp; combinations.</td>
<td></td>
</tr>
</tbody>
</table>
Textbook: Algebra 2 (Prentice Hall, 2012)

Materials: You will be responsible for bringing the following items to class and IT:
- Pencils
- Red Pens
- Loose-Leaf Paper
- Graph Paper
- Binder with dividers
- Passport Book
- Graphing Calculator*
- Loose-Leaf Paper
- 4 AAA batteries

*It is strongly recommended a TI-83+ or TI-84 be purchased. See the teacher if purchasing a calculator is not financially possible.

Grading Policy:

<table>
<thead>
<tr>
<th>FCPS Scale</th>
<th>A 93-100</th>
<th>B+ 87-89</th>
<th>C+ 77-79</th>
<th>D+ 67-69</th>
<th>F below 64</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- 90-92</td>
<td>B 84-86</td>
<td>C 73-76</td>
<td>D 64-66</td>
<td>B- 80-82</td>
<td>C- 70-72</td>
</tr>
</tbody>
</table>

* The Honors weighted GPA is not applied until the final year grade (additional .5 of a point)

If you are not receiving grade reports every two weeks, please email me. Also, you can contact your child’s subschool to update your contact information.

Quarter Grade: Each quarter grade will be determined by the following criteria:

- Homework/Classwork/Discussion Board 10%
- Tests/Quizzes/Test Corrections 90%

Final grade: The final year grade will be determined by the four quarter grades (20% each), the midterm exam (10%) and the final exam (10%). The midterm and final exam will be cumulative exams.

Homework Policy: Homework will be spot checked on a daily basis. You must have homework completed thoroughly on the due date to earn a maximum of 4 points. You must show work to earn full credit. You will earn the remaining 1 point by making corrections in red pen. I will collect all homework at the conclusion of each unit to accumulate the points. This is the only time your homework grade will be entered into the gradebook. Late work will only be accepted if you bring it to the teacher in the morning the very next class. Late work will only receive half credit. Fairfax High School celebrates Winter Break as family time that is homework free time. No homework will be given over winter break.

Discussion Board: Each student is required to participate in the class discussion board. The unit assignment sheet will show when posts are due. Be sure to follow the detailed directions given in class and will also be on Blackboard.

Quiz Adjustments: To encourage students to truly review their homework and quizzes and make adjustments based on their performance, students have the opportunity to raise their quiz average for the unit if they earn a higher percentage score on the unit test. For example, if a student has a quiz average of 80% for the unit, but earns an 85% on the unit test, the student's quiz average will be raised to an 85% by adding points in a "Grade Adjustment" column in the grade book.

Test Corrections: Any student who earns a D or an F on a test will be required to complete test corrections. These corrections must be completed in IT or after school. Students who earn grades of an A, B, or C may also choose to do corrections, but it is not required. Fixing one’s own mistakes is one of the most beneficial ways to learn. Also, it is essential to understand material before you can proceed to learn future material. Corrections are a separate, 10 point assignment (in the quiz/test category) and do not change the test grade. Corrections will not be accepted after the due date.
**Test Retakes:** Students who have not earned at least a 65% on a unit test are eligible to retake that test. Students must have all homework, test review(s) and test corrections for the unit completed and turned in before the retake. Retakes must be completed within two weeks of receiving the test grade. The test grade will be replaced with the new grade but capped at 65%.

**Make-up Work:** The number of days you are excused absent from class is the number of class periods you have extra to complete missed work. If you are absent the day before or the day of a quiz or test day, you are expected to be prepared to take the test the day you return to class. Other accommodations can be made at the teacher’s discretion.

**Attendance:** Good attendance in class is critical to success in any math class. Please refer to FHS student passport, page 16, for the school’s Attendance Policy.

**Honor Code Policy:** Students are expected to follow the honor code and complete their own work. The first time a student breaks the honor code at FHS, the student must retake the assessment for a grade of no higher than 65%. The second time the student violates the code, the student will receive a zero on the assignment. Please refer to page 14 of the FHS student passport for the school’s Honor Code.

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**Expectations:**

**Intervention Time:** You are expected to bring all required materials to IT. Please refer to page 8 of the FHS student passport for information on the school’s new Intervention Time.

Help: If you are absent or need extra help outside of class, I am available Thursdays when we have a late bus. Availability on other days is by appointment. Please do not wait until the day before the test to get help, come early and come often!! Be proactive.

**Electronic Devices:** Devices are to be silent and out of sight, unless the teacher gives students permission to use them. Failure to comply with the policy governing the use of electronic devices in classrooms during the school day may result in confiscation of the device.

The “Students Rights and Responsibilities” will be strictly enforced.

1. Be prompt. This means be in the classroom with your homework on the desk before the bell rings.

2. Be prepared. This means coming to class ready to learn with all required materials including your homework.

3. Be polite. This means using appropriate language, treating others the way you want to be treated, and respecting the property of the teachers, the school and other class members.

4. Be productive. This means participating in class discussions and completing all assignments including classwork, groupwork, homework, quizzes, and tests. It is important to remember that working together and copying another student’s work are very different things.

**SOL Information:** There is a Virginia Standards of Learning (SOL) exam for this course which will be given at the end of May or, possibly, the beginning of June. Information about preparation materials will also be given out in the 4th quarter and posted on Blackboard.
Return this page to Mrs. Dietz. Keep the previous information in your notebook for future reference.

**Syllabus Agreement**

*We have read and understand the following:*
- Algebra II Honors course requirements and expectations.
- the FHS Attendance Policy.
- the FHS Honor Code.
- the FHS Electronic Device Acceptable Use Policy.

______________________________  ____________________________________
Student Name (please print)    Parent/Guardian Name (please print)

______________________________  ____________________________________
Student Signature     Parent/Guardian Signature

Best way to contact you during the school day: ________________________________

➢ *Please make sure your contact information is current with the school. If necessary contact your child’s subschool to update your contact information.*

➢ *Students, please make sure your Blackboard email is current and correct. We do use this as a means of communication with you.*