



SLCA SYLLABUS 2018-2019

ALGEBRA I

Mission Statement: SouthLake Christian Academy exists for the sake of God's glory and mission; proclaiming the gospel and discipling the whole person in all aspects of God's reality.

Course Description: Algebra I utilizes students' mastery of middle grade math concepts without the use of calculators to integrate numbers, variables, and graphs in algorithms. Students will practice, among other things, solving equations and inequalities; graphing lines; finding slope, midpoints and distances; using properties to solve algebraic proofs; analyzing data, graphs, statistics, and probabilities; exploring functions and their graphs; and developing problem-solving skills and critical thinking as topics are introduced. Students will also be introduced to quadratic and exponential functions. Technology is integrated in notes and class lessons, as well as some graphing calculator usage for specific topics. Most calculations should be mastered by hand, and skills will be practiced throughout the course. Real-world application problems will also be integrated throughout as students work to develop concept comprehension to utilize in future courses. Algebra I requires students to apply properties at a higher level of complexity in problem-solving, abstract reasoning, and real-world applications. Throughout the course, a Christian worldview will be incorporated to assist students in recognizing and appreciating the sovereignty of God through mathematics. *Students will take midterm and final exams.* **Prerequisite: none**

Course Objectives: Students who complete this course will be introduced to algebraic concepts to equip them for college prep courses and to enable them to better understand God's world mathematically. Upon the completion of this course, students should be able to:

1. Understand and apply order of operations, integers and rational numbers, equations and inequalities
2. Work with exponents and polynomials, factoring, graphs and linear equations
3. Identify properties and solve systems of equations with inequalities and absolute value, rational expressions and equations
4. Understand rational expressions and equations, relations and functions, and quadratic equations

Technology: Most calculations in this course will be done without the use of a calculator to ensure that students have mastered operations with fractions and decimals. A calculator will be used for exploration and deeper understanding of concepts. Students are recommended to purchase a calculator in the TI-84+ family, since students will use a graphing calculator in future courses (Geometry and Algebra II). A scientific calculator is acceptable (TI-30 family recommended). If students misuse calculators, they will be asked not to bring it to class.

Evaluation: The course will be evaluated as follows:

Homework Policy – Homework and class work will make up 10% of the overall grade. Homework will be assigned and checked for completion. All students begin the semester with a 100% homework grade. For each assignment not completed, 3 points will be subtracted. For example, if three homework assignments are not completed, then the overall homework grade would be 91%. No credit will be given for late assignments.

Tests will be weighted as **70%** of the student's total grade. Tests will be given approximately every 2 weeks and will be announced one week prior.

Quizzes are worth **20%** of the student's total grade. Quizzes will be given once or twice per testing unit and ***may or may not be announced***.

Test Make-up Policy: If a student comes into school late and as a result has missed a test, the student will immediately report to the office to make-up that test.

Students have **ONE** day for each day absent (excused) to makeup all tests and quizzes. If the test/quiz is not made up in this period, **10 pts will be deducted** from the final test/quiz grade **for each day past the makeup day**. Students should meet with their teacher(s) ASAP to request alternate arrangements if they do not have a study hall or have multiple assessments to complete.

All tests/quizzes are made up during the assigned test makeup period or other study hall. Students may NOT miss a scheduled class to make up a test. If students make up a test or quiz during a study hall other than the assigned test makeup period, they must go with a pass from their study hall teacher to the office to take it.

****Extra Credit** beyond possible bonus opportunities during tests will not be provided as per school policy. Bonus opportunities on test will not exceed 5 pts and the final grade will not exceed 100%.

Classroom Expectations:

- Follow all rules and procedures listed in the SouthLake handbook.
- Respect for all staff, students, and guests in the class.
 - *Be devoted to one another in love. Honor one another above yourselves.* Romans 12:10
- Be prepared for class daily, this includes your book, binder, homework, notes, pencils, and a positive attitude.
 - *Do you not know that in a race all the runners run, but only one gets the prize? Run in such a way as to get the prize.* 1 Corinthians 9:24

Required Supplies:

1. Pencils, eraser
2. 3-hole notebook paper
3. One 3-ring binder
4. Graph paper as needed
5. TI-84+ Graphing Calculator or Scientific Calculator (TI-30 Family)