



SLCA SYLLABUS 2018-2019

HONORS GEOMETRY

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: Geometry integrates algebra and some discrete mathematics. The basic Euclidean tools of geometry are expanded with proofs and evaluations of logical arguments. Students study triangles, polygons, circles, and geometric solids, as well as coordinate geometry and graphing. They will learn basic constructions and manipulate formulas through exploration and inductive reasoning. Students will develop skills in carrying out various algorithms, developing and using geometric properties and relationships, and applying geometry in realistic situations. The use of technology is integrated in the course with graphing calculators. Real-life application problems will assist students in understanding and using concepts as well as assigned projects that apply mastered skills and knowledge. SAT- and ACT-type practice problems will enhance student critical reasoning and analysis skills, as well. Throughout Geometry, algebraic principles will be reviewed and applied in problem-solving as preparation for the next mathematics course in sequence. Throughout the course, a Christian worldview will be incorporated to assist students in recognizing and appreciating the sovereignty of God through mathematics.

Students in the Honors course should be able to solve a broader range of complex problems using their critical thinking skills. Honors Geometry is a fast-paced course in which students should be prepared to be challenged and work hard. They will be tested on more application and conceptual problems. *Students will take midterm and final exams.*

Pre-requisites:

- Rising 9th
 - Minimum cumulative grade of 83% in Algebra I and
 - Recommendation from previous year's math teacher and
 - Minimum score of 87% on Algebra I final exam
- Rising 10th
 - Minimum cumulative grade of 87% in Algebra I and
 - Recommendation from previous year's math teacher

Course Objectives: Students will develop proficiency with geometric relationships and deductive strategies that can be used to solve a variety of real-world and mathematical problems. Critical reasoning and logic abilities will also benefit, as well as the ongoing development of a Christian worldview through which students view mathematics as an instrument of dominion.

Text: Prentice Hall Mathematics: Geometry, 1st ed. Pearson Education, Inc., 2009 (provided by school)

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 (Algebra II and beyond). A scientific calculator is acceptable (TI-30 family recommended). If students misuse calculators, they will be asked not to bring it to class.

Evaluation: Semester Grades: Class Work – 80%; Final – 20%
Class Work Grades: Tests – 80% (6-8 per semester)
Quizzes – 20% (pop or announced)

No extra credit will be offered per school policy. However, bonus questions may be offered on a test, not to exceed 5 points and 100% maximum test grade. Bonus points may not be transferred between tests.

Homework Policy: Assignment will be given every day with few exceptions. Although assignments are not counted for a numerical portion of the grade, homework will have a direct effect on the performance on tests and quizzes. Therefore, it is imperative that all assignments are completed in a timely manner. Completed assignments may count as bonus points towards a quiz or test.

Students are required to show their work in pencil on all assignments to receive credit for completion of the assignment.

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 make up 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.

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

Important Points: You are working to learn, and the instructor is working to supply you with everything you need TO learn. As we work together, let's remember for Whom we are working: the Lord. (Col. 3: 17,23). Geometry is the mathematical providence He has for you this year – His appointed tasks for us in this class were established before the Creation of the world. Let's be diligent and faithful together in their completion, as we grow in our understanding of God through geometry.

Required Supplies:

- 3 ring binder (1 to 1.5 inch)
- Loose leaf notebook paper

- PENCILS -NO PENS!
- 10 file folders
- Graphing Calculator Recommended (TI-84+ family) or scientific calculator (TI-30 family)