



SLCA SYLLABUS 2018-2019

ADVANCED FUNCTIONS AND MODELING

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: Advanced Functions and Modeling provides students an in-depth study of modeling through functions. Linear, exponential, quadratic, logarithmic, and trigonometric models will be studied. Data analysis, combinatorics, and probability will be studied as well. A graphing calculator is used for exploration, modeling, computations, and function analysis. This course also serves as a bridge for students who have taken Algebra II, but are not yet ready for the rigors of Pre-Calculus.

Required Text provided by SLCA

- *Advanced Mathematics Precalculus with Discrete Mathematics and Data Analysis.* Brown, McDougal Littell, 2000.

Evaluation

- **Tests: Tests account for 70% of the quarter grade.**

Tests will be given every 2 – 3 weeks. Due to the amount of material covered in a chapter, a test may sometimes cover only part of a chapter or several chapters. Make-up tests need to be completed as soon as possible. Any student who takes more than a week to make up a test will lose a minimum of 10 points from that test. We will begin new material immediately after each test, meaning that prolonging a make-up test will only make it harder to recall prior information.

- **Quizzes: Quizzes account for 20% of the quarter grade.**

Announced and/or pop quizzes will be given at least weekly. If you are absent you must consult me on a method of making up a missed quiz.

- **Homework Policy – Homework and class work will make up 10% of the overall grade.**

Homework will be assigned daily and checked for completion. No credit will be given for homework turned in late. 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.

- **Notebooks:** All students are expected to keep a neat, orderly notebook. Notebooks should include the following: Calendar, Course syllabus, Daily class notes (this is why we call it a notebook) and warm-ups, Assignments, and Quizzes.

- **Projects:** A paper or project may be assigned at some time. It may be graded as a test or quiz grade, at teacher discretion.

- **Extra Credit:** No extra credit will be offered per school policy. However, students may be given a bonus question(s) on each test (not to exceed more than 5 pts, and 100% maximum test grade). Bonus points cannot be transferred to past or future tests.

Attendance

- **Absences:** It is your responsibility to inquire about all make-up assignments and tests as a result of an absence. A deadline will be given by the teacher and agreed upon by the student. Note: If you are absent due to a school activity, you must make arrangements prior to your absence.

- **Tardies:** When you are tardy, it is your responsibility to obtain a pass from either the office or a teacher; otherwise you will not be admitted into class.
- **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 this is not possible, arrangements for when to take the test should be made within this window of time. 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**. After two days have elapsed, an "M" will be assigned on RenWeb, which will calculate your grade as if it were a zero, until the test is made up.

Classroom Rules and Expectations

- Follow all rules and procedures in the SouthLake handbook.
- Come to class on time, prepared, with a positive attitude, and all materials for the day. Materials include your textbook, notebook, paper, PENCIL, completed assignment, and your TI 84+ graphing calculator.
- Ask any question; we are here to learn together!! But let's maintain our respect for one another; only one person should be talking at a time.
- You will learn proportionately to the effort you put in, and the outlook you bring; you bear the responsibility for your success!!

Formula for Success:

- **Take Notes-** you should be writing down more than just equations and formulas. For example, why a certain formula was appropriate or a written explanation of how and why a certain step was performed will be of much use later. (This will also help in future math classes, even in college!)
- **Go** over your notes as soon as possible after class to fill in any missing information and to check to see whether you understand what you have written.
- **USE** your notes when doing homework or studying for quizzes and tests.
- **READ YOUR TEXTBOOK** to supplement the lesson, to reinforce what was learned, and to further your knowledge of the subject. Reading the lesson before class is strongly encouraged!
- **Own your education!!** ☺

Christian Perspective: We serve King Jesus here....

- **Colossians 3:17** And whatever you do, whether in word or deed, do it all in the name of the Lord Jesus, giving thanks to God the Father through Him
- **Colossians 3:23** Whatever you do, work at it with all your heart, as working for the Lord, not for men.
- **Philippians 2:14** Do everything without complaining or arguing, so that you may become blameless and pure, children of God without fault in a crooked and depraved generation, in which you shine like stars in the universe as you hold out the word of life...

Required Supplies:

- Notebook – I would recommend using both a spiral notebook with graph paper for notes/homework, and a small (~1") 3-ring binder for any handouts
- Paper & **Pencil**, of course
- A **Graphing Calculator is required** for the course. It is recommended that students purchase a TI- 84+ calculator. Please note that depending on the content, a calculator may or may not be permitted during a quiz or test.