GRACE CHRISTIAN SCHOOL

**PRECALCULUS**

Syllabus

Teacher: Jody Smith

School Year: 2020-2021

GRADE: 11 and 12 DATE: August 18, 2020

TEXT/RESOURCES:

Precalculus 2nd Edition BJU Press

Khan Academy Precalculus (www.khanacademy.org)

Guided notes generated by Flamingo Math for precalculus

OVERVIEW:

Gives students a balanced study of the theoretical foundations of calculus and the practical real-world applications of those foundations with this precalculus course.  *Students will have the opportunity to use technology to explore mathematical concepts in the Technology Corner feature. They will learn about the TI-84 Plus family of graphic calculators.*

MAJOR TOPICS and SKILLS

FIRST QUARTER

1. Advanced Algebra Review

2.Analyzing Functions

3. Radical, Polynomial and Rational Functions

SECOND QUARTER

1. Exponential and Logarithmic Functions

2. Trigonometric Functions

3. Trigonometric Identities and Equations

THIRD QUARTER

1. Vectors, Polar Graphs and Complex Numbers

2. Systems and Matrices

3. Analytic Geometry

FOURTH QUARTER

1. Sequences and Series

2. Descriptive and Inferential Statistics

3. Limits, Derivatives, and Integrals

Grading:

Students in precalculus will generally have one quiz or test per week in addition to assigned homework problems. Quizzes cover 1-3 sections of material and contain open-ended questions. Unit tests frequently include a mix of multiple-choice and open-ended questions. • The marking period grade is determined as follows:

 50% homework and classwork

 20% quizzes/Khan Academy progress

 30% chapter/unit tests

• Homework is graded for completeness on a 0-2 scale:

2 = all problems or Khan Academy assignments attempted- written work is shown

 1 = not all problems attempted OR work is incompletely shown

 0 = assignment not turned in

Assignments will be due at the beginning of class if they are to be turned in to the teacher. If they are assigned online (Khan Academy) they will be due by midnight the day they are made “due”. Late assignments receive half credit for the first day and no credit thereafter, unless there is communication with the teacher.

Supplies required for class each day:

• 3-ring binder with extra lined or graph paper

• Supply of pencils, erasers, and a pen for correcting homework

• Graphing calculator

• Supply of graph paper and straight-edge (optional)

Course Policies:

* Khan Academy may be a source of graded work this year. This is an honors class and there is an honor system that you will be doing your own work on Khan Academy.
* Do any written homework in pencil and check it at home with a pen. Remember that homework is graded for completeness and your grade depends on your trying all parts of every assigned problem.
* While study groups are strongly encouraged, all graded work that is handed in must be your own.
* Be on time to class and limit absences to those that are absolutely necessary.
* See Mrs. Smith for missed assignments immediately after any absence and prior to any planned absence.
* The graphing calculator enables students to generate graphs and tables quickly and accurately from algebraic functions. The TI-83 and TI-84 will be the model used by the teacher.

Classroom Expectations:

 ***Be Prompt Be Prepared Be Polite***

* no food or drink in the classroom unless provided by the teacher
* Coordinate planned absences in advance
* FACTSIS - assignments will be posted on FACTSIS (formerly RenWeb)
* Google Classroom is where I will share documents, class notes, summary pages, additional videos and resources.

In General, the policies for assignments, late work, make-up work, etc. will be following the GCS Student Handbook.

Office Hours: Please email me if you need anything after the second period. I am in the building for the first two periods, but if you need to make a schedule for help with math, I can work with you. I will be in room 102 before the first period if you need to schedule extra help then.