

Pre-Calculus / Trigonometry

2017-2018

Course Syllabus

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Course Description

Math Analysis, or Pre-Calculus, is a high intensity course that will include an integration of Algebraic and Geometrical Concepts. We will cover a great deal of material this year and move at a rapid pace. The goal of the course is to prepare you for a study of Calculus, whether at Lakewood High or in college.

Attendance

Attendance is vital. While good attendance does not guarantee success in this course, it does increase the likelihood of earning a passing grade.

Office Hours

Each Monday, Tuesday, & Friday, 7:00 – 7:30 a.m. in room B-204. Arrangements can be made for other times.

Grades

Grades will be based on the following:

1. **EXAMS**

Exams will be taken at the end of each unit of study. You will be given a minimum of one week notice prior to the exam date. This is the most important piece of the overall grade. Each exam will cover the new material from the current unit and may include problems from previous units. Students who miss an exam due to an excused absence will be given one week from the original exam date to make up the exam. The make up exam may be completely different from the original and may be longer and more challenging. If the make up exam is not taken within the one week time period, a score of zero will be recorded. Any exam missed due to an unexcused absence will not be scored and a score of zero will be recorded. Attendance is your responsibility. **Exams account for 60% of your overall grade.** A final exam will be given in both December and May. Please refer to your planner for exam dates. There are no attendance exemptions for the final exams. The final exam will count as a double test score. The percent earned on the final exam will replace the lowest test score earned during that semester. (A missed exam with a score of zero does not apply and is not eligible to be counted as the low test score)

2. **QUIZZES**

Quizzes will be given once per week on either Thursday or Friday. We will take approximately 13 quizzes and will keep only the top 10 scores. Quizzes missed must be made up prior to the next class period we meet. Arrangements can be made to take quizzes ahead of scheduled time, during the student's open hour. **Quizzes account for 15% of your overall grade.**

3. CLASSWORK/PROJECTS/POW's

Classwork will include warm up activities, group work completed during the class period, and occasional homework assignments. **Classwork accounts for 15% of your overall grade.** All worksheets for the semester will be available in the new Pre-Calculus textbook.

4. DTQ's (Do These Quickly)

DTQ's are warm up activities utilized to begin a class. Most of these activities are comprised of multiple choice questions that will begin to prepare students for the SAT Test in the spring as well as AP math exams next year. Each DTQ is worth ten point. **DTQ's accounts for 10% of your overall grade.**

5. BONUS:

Students will have the opportunity to make up points during the semester.

A) Students may bring a progress report, signed by the parent, during the last week of each month. These progress reports can be printed off Infinite Campus.

B) Students can earn points by coming in during access or any free period they have on their schedule. Access is from 7:00 - 7:30. Students may come in to my room during their free periods to work on assignments, study for exams or quizzes, or to work on notes. This opportunity is available even during periods in which I am teaching a different class. Students can come in, sign their name in the notebook, and sit in an empty desk and work as long as they need. Points are earned based on the time spent working on math only at the rate of 1 point for each 30 minutes, one letter grade max.

Homework will be given daily and will be handed in two class periods later (generally). Not every assignment will be collected. It is the responsibility of the student to complete the assigned problems, even if the assignment is not collected. Homework problems will be used to develop the daily warm up activities and weekly quizzes. Assignments will be given to provide opportunities for practice of the key concepts in this course. Failure to complete assignments will result in lower grades.

Absences

Absences will be recorded as excused and unexcused for the purpose of makeup work. Work that is missed due to absences will receive credit if the student contacts teachers on the day he or she returns from any absence to arrange to complete all makeup work assigned and to establish when this makeup work is due.

Makeup work for the first two unexcused absences will be allowed for credit with one grade reduction for all work completed. After the first two unexcused absences from a class, makeup work will be allowed for credit with two letter grade reductions for all work completed.

Grade Breakdown

A	90% or higher	Exceptionally strong knowledge of content
B	80% to 89.9%	Strong knowledge of content
C	70% to 79.9%	A good knowledge of content
D	60% to 69.9%	Some knowledge of content
F	Below 60%	No evidence of knowledge of the content

Books & Materials

Textbook: We will use the Lakewood High School developed textbook for this course. Cost is \$5.00

Materials: 1) 3-Ring Binder for textbook and worksheets
 2) Graphing Calculator (TI-83, TI-83Plus, TI-84, TI-84 Plus)

Class Notes / Lecture

Class notes for each section of this course will be available via our new Pre-Calculus textbook. The notes are developed as a fill in the blank format to allow student to focus more time on the presentation and less on writing down every little detail. Students who miss class need to print a copy of the notes and see a classmate to complete them. Office hours will not be used for repeat lectures.

Food & Drink

As per school policy, no food or beverage, except water, is allowed in the academic wing, no exceptions.

Technology in the Classroom

Cell phones, head-phones, and i-pods are to be off and put away during class.
Teachers may determine when cell phones and other technology are to be used for educational purposes.

1st Offense: Warning
2nd Offense: Teacher takes the device
3rd Offense: Teacher takes the device and brings it to the student's administrator.

Video Games: The playing of video games will NOT be allowed in the school.

I reserve the right to change this syllabus without notice.

Scope & Sequence of topics:

FALL SEMESTER

Unit 1 ~ Functions

Unit 2 ~ graphing Functions, Piecewise Functions & Compositions

Unit 3 ~ Polynomial Curve Fitting

Unit 4 ~ Rational Functions

Unit 5 ~ Zeros of Polynomial Functions

Unit 6 ~ Logarithmic and Exponential Functions

Exams to follow each specific unit. Final Exam in December to cover all 6 units

SPRING SEMESTER

Unit 7 ~ Trigonometric Functions: Trigonometric Graphs

Unit 8 ~ Application of Trigonometric Functions: Trigonometric Identities

Unit 9 ~ Polar Equations

Unit 10 ~ Parametric Functions

Unit 11 ~ Conic Sections

Unit 12 ~ Preview of Calculus, including:

* Limits

* Derivatives

Exams to follow each specific unit. Final exam in May to cover all 12 units.

