# Analysis with Trigonometry 

## Google Classroom Code: ute2zl

## REMIND: text @hh84fd to 81010

## Course Description and Purpose

The course is a study of functions and relations with the addition of trigonometric functions important for success in college level math. Students are expected to have a solid foundation in Algebra 2 in order to be successful as this course is designed to follow the concepts learned previously. It is designed to prepare students for the rigors of Calculus and further math, and, as such, concepts are developed in a rigorous manner. Students are expected to attend all class meetings, and complete all assignments when they are due, to the best of their own ability. Students are encouraged to utilize outside sources of information, as well as be responsible for learning the material including attending after school help sessions when available.

- The $1^{\text {st }}$ Semester is devoted to the study of Trigonometry: the unit circle, trigonometric functions and their graphs, using and proving trigonometric identities and solving trigonometric equations.
- The $2^{\text {nd }}$ Semester will revisit some concepts from Algebra 2 in preparation for Calculus and a continued study of functions: study of complex numbers, exponential and logarithmic functions, polynomial and rational functions and their graphs, conic sections and parametric equations, proofs by mathematical induction, sequences, series, convergence and divergence.


## The Rule of the Room is RESPECT:

| RESPECT for yourself | RESPECT for others | RESPECT for the class and the school |
| :--- | :--- | :--- |

## Classroom Expectations - In addition to the school policies, students are expected to:

1. Be respectful of others and their property. Profanity, vulgar language or harassment will not be tolerated and may result in detention or class suspension.
2. Arrive to class seated before the bell rings with all materials required (see below)
3. Follow directions given by the teacher.
4. Participate, in an appropriate manner, to classroom discussions and activities.
5. Work with integrity and honesty - do not copy other student work and pass it off as your own.
6. Only use electronic devices (smart phones, mp3 players, etc.) for the specified educational purpose outlined by the teacher. Otherwise, the devices are to be silent and out of sight. Devices disrupting the learning of the student or other students will be confiscated.

- A phone call to your parent/guardian will be made for any class detention or suspension.

Food and Drinks: Drinks must have a lid that can be closed, no cans and no soda/energy drinks. Healthy snacks are allowed as long as they do not cause a disruption to the learning environment, ie sharing or orange fingers.

Bathroom: Students may not use the restroom during the first or last 15 minutes of class. Students must sign out/in and take the lanyard pass to use the restroom. Students must do so without causing a disruption to the learning environment. If privilege is abused then the bathroom privilege will be revoked.

Text: PRECALCULUS $3^{\text {rd }}$ edition by Blitzer
Materials: It is HIGHLY recommended that students acquire and bring the following to class -

- Lined paper notebooks or graph paper notebooks for assignments. Assignments will be completed in notebooks.
- Spiral bound notebook dedicated for note taking for this class only and not to be used for assignments.
- Pencils (mechanical is especially helpful), erasers, and a red pen for homework corrections.
- Calculator! - A graphing calculator is highly encouraged (TI-83 and TI-84 recommended). However, a scientific calculator can be used (recommend the TI-30XIIS). Phone/iPod calculator apps are discouraged for use in the classroom and will not be used on exams/quizzes. Other types of calculators will not be supported, and most examples/demonstrations will be using the TI-84 calculator.


## Grading

$\star$ Grading scale: A (100\%-90\%) B (89\%-80\%) C (79\%-70\%) D (69\%-60\%) F (<60\%)
Grades will be based upon the following weights:
$\star$ Quizzes, Unit Tests, and Final Exams 80\%
$\star$ Homework, Classwork, Warm-Ups, Projects, etc. 20\%

## Quizzes, Unit Tests, and Final Exams (80\% of grade)

- Unit exams will be given at the end of each unit. Unit exams will be primarily free response, and may or may not allow the use of calculators. To earn full points on the exam, all work pertinent to the solution is required to be shown. In addition, all students will complete an exam analysis for additional points to be added to the exam grade.
- Students absent from an exam, with an excused absence, may arrange to take the exam within a week of the absence outside of normal class time (unless other arrangements are made) and be taken in one sitting. If not made up within a week, the student will lose $20 \%$ for each week thereafter.
- Retakes will not be permitted. It is expected that the college and career ready student will be prepared for the test on the test date.
- The Semester Final exam will be comprehensive over the material for the year and be primarily free response. If a student is absent on the day of the final, the grade will be a zero until made up. If it is known prior to the final that a student will be absent, arrangements must be made to take the final exam.
- Quizzes are assessments meant to gauge student learning as the unit progresses. Questions are taken directly from the previous week's assignments. Quizzes may not be retaken for a better grade. Case by case exceptions may be made.


## Homework, Classwork, Warm-ups, Projects, etc. (20\% of Grade)

- Assignments will include problems out of the text and worksheet practice. It is imperative that students complete every assignment on time in order to be successful in this class!
- Mandatory: Assignments are to be completed in a notebook, in pencil or pen, with a heading that includes the assignment number and description of the assignment.
- Assignments are due the following day and worth 10 points each. A 10 means the student mostly completed and attempted all problems on the assignment with work shown. Partial credit will be earned for assignments partially completed. If half or more is complete, but not enough for 10 points, the student will earn 8 points. If less than half, 6 points. If an assignment is not completed, 0 points, etc.
- The equivalent percentage from the quiz score may be used to replace a 0 to 5 score on an assignment. For example, if the student scored $70 \%$ on the quiz, any 0 or 5 grades on assignments for that quiz will be replaced with a $7 / 10$. If you want to change a homework score to a quiz score that covers the same sections, speak with me at lunch or after school and bring the quiz.
- Any work not turned in on time will be entered as a " 0 " in the grade book unless the student is excused absent from class. Any 0 scores for assignments may be replaced with the score from the quiz covering those assignments. See example above.
- Students may turn in homework assignments the day it's due FOR FULL CREDIT by 3:30PM AT THE LATELST using Google Classroom in the appropriate unit assignment folder with a heading that includes the assignment number and a description of the assignment.
- Projects may be scheduled throughout the year covering various topics. A project typically is an extended assignment that will be scheduled for work outside of class for a week or more.
- We will also do classwork daily in a variety of was (individual white boards, pair share, worksheets, and/or book work) to insure that students understand the concepts before leaving class. These items may not be collected for points but are crucial to students' success.
- Absences: For each day of excused absence, the student has one day for each day missed to turn in assignments and receive full credit. Students must write the word "Absent" and the date(s) of the absence at the top of the page to obtain full credit.
- If you know in advance that you will not be in class, or a circumstance beyond your control prevented you from turning in work, make time to discuss the issue with the teacher and make arrangements to turn in work.


## Extra Credit

Extra credit is not given out in the form of assignments. A student or parent may not request extra credit assignments. However, there will be limited opportunities where extra credit may be earned. Take advantage of them!

## In closing...

V Office hours: After school most days until 4 pm and during lunch. There will be special tutorial sessions announced throughout the year either before or after school particularly before unit tests and finals.
$\square$ My expectation: Students are expected to take responsibility for their learning by completing assignments on time, analyzing their work and making necessary corrections, and having integrity in what they do. In college, you will be responsible for seeking help when needed and having a high level of self-discipline.
ஏ WORKING TOGETHER, WE ARE SUCCESSFUL!!.

## MYP Assessment and Final Grade Information

Assessment: As an IB World School for the Middle Years Programme, students will be assessed on four MYP criteria (A, B, C, and D) for all subject areas. I will use IB MYP rubrics to assess the knowledge, understanding, and skills of each student's performance and not an average of points for these assessments.

The four criteria for Mathematics are :

Criterion A: Knowing and Understanding
Criterion B: Investigating Patterns
Criterion C: Communicating
Criterion D: Applying mathematics in real-life situations

MYP assessments will be scored on a scale from $0-8$. These $0-8$ scores will be converted to a percentage that reflects the appropriate letter grade. Without this conversion, a student receiving a 4 on an MYP assessment would receive a $50 \%$. MYP, however, does not consider a 4 to be an F .

The grade conversion will be as follows for Mathematics:

| Rubric Score | Grade conversion | Percent Conversation |
| :---: | :---: | :---: |
| 8 | A | 100 |
| 7 | A- | 95 |
| 6 | B + | 87 |
| 5 | B- | 83 |
| 4 | C + | 77 |
| 3 | C- | 73 |
| 2 | D | 67 |
| 1 | D- | 63 |
| 0 | F | 50 |

Students will be assessed using MYP rubrics for all MYP objective strands at least once per semester and twice per academic year. These achievement level scores will be reported in Infinite Campus.
Final grades: Students will receive a traditional letter grade (A-F) and a final MYP grade (1-7) for their achievement at the end of the course.

To determine the final MYP grade, I will add together the student's final achievement levels in all criteria ( $A+B+C+D$ ) of the subject group. That sum total will determine the MYP final grade.

The table below provides the MYP grade descriptors for the MYP grades:

| Grade | Boundary guidelines | Descriptor |
| :---: | :---: | :---: |
| 1 | 1-5 | Produces work of very limited quality. Conveys many significant misunderstandings or lacks understanding of most concepts and contexts. Very rarely demonstrates critical or creative thinking. Very inflexible, rarely using knowledge or skills. |
| 2 | 6-9 | Produces work of limited quality. Expresses misunderstandings or significant gaps in understanding for many concepts and contexts. Infrequently demonstrates critical or creative thinking. Generally inflexible in the use of knowledge and skills, infrequently applying knowledge and skills. |
| 3 | 10-14 | Produces work of an acceptable quality. Communicates basic understanding of many concepts and contexts, with occasionally significant misunderstandings or gaps. Begins to |


| 4 | $15-18$ | Produces good-quality work. Communicates basic understanding of most concepts and <br> contexts with few misunderstandings and minor gaps. Often demonstrates basic critical <br> and creative thinking. Uses knowledge and skills with some flexibility in familiar <br> classroom situations, but requires support in unfamiliar situations. |
| :---: | :---: | :--- |
| 5 | $19-23$ | Produces generally high-quality work. Communicates secure understanding of concepts <br> and contexts. Demonstrates critical and creative thinking, sometimes with sophistication. <br> Uses knowledge and skills in familiar classroom and real-world situations and, with <br> support, some unfamiliar real-world situations. |
| 6 | $24-27$ | Produces high-quality, occasionally innovative work. Communicates extensive <br> understanding of concepts and contexts. Demonstrates critical and creative thinking, <br> frequently with sophistication. Uses knowledge and skills in familiar and unfamiliar <br> classroom and real- world situations, often with independence. |
| 7 | $28-32$ | Produces high-quality, frequently innovative work. Communicates comprehensive, <br> nuanced understanding of concepts andcontexts. Consistently demonstrates <br> sophisticated critical and creative thinking. Frequently transfers knowledge and skills <br> with independence and expertise in a variety of complex classroom and real-world <br> situations. |

## Analysis with Trigonometry Contract

I have read and understood these class expectations, grading policy, and procedures.

Student Name (please print): Period $\qquad$

Student Signature: $\qquad$ Date $\qquad$
Parent/Guardian Name: $\qquad$ Relationship to Student: $\qquad$

Parent/Guardian Email: $\qquad$ Best Phone \#: $\qquad$
Parent/Guardian Signature: $\qquad$ Date Signed: $\qquad$

Is there anything that you (parent or student) would like me to know?

