## Pre-Calculus

## Course Syllabus

## Introduction:

Pre-calculus is primarily a preparation course for calculus. It is designed to provide students with a deeper understanding of the Functions that are at the core of calculus: Trigonometric, Logarithmic, Exponential and Polynomial. In addition, the course will provide focus to strengthening the algebra skills required to complete the rigors of calculus. Pre-calculus is also designed to introduce topics of other college level mathematics including Linear Algebra and Number Theory.

In order to successfully meet the objectives of the course it is expected that students will take on certain responsibilities. These responsibilities include, but are not limited to:

- Keeping a neat and complete notebook
- Attending every class
- Completing every assignment
- Seeking out additional help beyond that provided during class
- Maintaining the highest degree of academic honesty


## Calculator:

A graphing calculator is required. TI-83/84 is highly recommended. Calculators with Computer Algebra Systems are NOT allowed (TI 89, TI 92 etc).

## Homework \& Board Problems:

A homework assignment sheet will be provided at the beginning of each unit. Each assignment will consist of 4 even numbered exercises and a varying quantity of odd numbered exercises.

Homework will be collected and graded as follows: Even numbered problems will be worth 2 points each plus an additional 2 points will be awarded for the completion of the odd numbered exercises. Exercises will be considered incomplete if no work is provided.

Homework may be checked on a daily basis, at the discretion of Mr. Bo. Homework that is checked in class will be worth 4 points.

It is the students' responsibility to ensure that homework is done completely and correctly. Due to limited class time, the discussion of solutions to the odd numbered problems will be minimal. Therefore, it is expected that students will seek help outside of class for the odd numbered problems.

Four Students will be selected at random at the beginning of class to provide solutions to the even numbered problems (Board Problems). A separate grade will be given at the end of each marking period based on the completion of the board problems. Even numbered problems must be completed prior to coming to the board.

## Homework Incentive:

A 2 point bonus will be awarded on a unit test if homework is $100 \%$ complete for that unit. A minimum of 2 homework assignments must be checked per unit.

## Tests \& Quizzes:

Quizzes will be given regularly and they may be unannounced. Quiz questions will typically be similar to questions assigned in the homework. Therefore, it is to the student's advantage to maintain complete and correct homework assignments.

A unit test will be given at the end of each unit.

## Final Exam:

A local final exam will be administered at the end of the course. The final exam will count as $1 / 5$ of the overall course grade.

## Research Project:

A research project will be assigned in the $4^{\text {th }}$ marking period and will be weighted the equivalent of one unit test. The project will cover a mathematical topic chosen by the student. The project will culminate with a 5-10 minute presentation to the class.

## Grades:

Tests/Research 60\%
Quizzes $\quad 25 \%$ (minimum 3 quizzes given = lowest quiz grade dropped)
Homework 10\%
Board Problems

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5 \%
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Final Course Grade: Average of 4 marking period grades +1 final exam grade.

## Additional Help:

- Mr. Bo is available during his lunch period and afterschool by appointment.
- Additional help is also available in the Math Lab. (Times and location are posted in the room)


## Academic Honesty:

Academic dishonesty and cheating will not be tolerated. Students are expected to follow the academic honesty guidelines set forth by Horseheads High School. Disciplinary actions for cases of cheating and plagiarism will be handled in accordance with Horseheads High School policy.

