Probability, Statistics and Trigonometry
Syllabus
Semester 1 – 2022-2023

Instructor: Mr. Vrieze

Texts: Core Connections Algebra 2, CPM Educational Program 2013
        Algebra 2 Connections, CPM Educational Program 2009
        Statistics in Action, Key Curriculum Press 2004

Course Description:
    PROBABILITY, STATISTICS AND TRIGONOMETRY, CREDIT: 1, LENGTH OF COURSE:
    Semester
    PREREQUISITE: Advanced Algebra

    PST starts with several Algebra topics which include but are not limited to matrices, the inverse of
    a function, complex
    numbers, and an introduction to logarithms. Students will use statistical concepts to collect data,
    display data, analyze
    data and make decisions based on the analysis thereof. Students will use probability to model
    situations and make
    predictions. Students will also learn to solve problems using right angel trigonometry, the unit
    circle, Trigonometric
    Identities and periodic functions.

Mathematical Practices that will be emphasized:
    1. Make sense of problems and persevere in solving them.
    2. Reason abstractly and quantitatively.
    3. Construct viable arguments and critique the reasoning of others.
    4. Model with mathematics.
    5. Use appropriate tools strategically.
    6. Attend to precision.
    7. Look for and make use of structure.
    8. Look for and express regularity in repeated reasoning.

Major Content Areas:

Ch 3 Equivalent Expressions (Prop of exps, binomial sq...)
Ch 3 Rational Expressions
Ch 4 Systems of Inequalities
Ch 5 Inverse of a Function
Ch 5 Composites of Funtions
Ch 5-6 Logarithms
Ch 6 Systems of Three Equations
Ch 7 Right Triangle Trigonometry

~~Ch 7 Non-right Triangle Trigonometry~~
Ch 7 Unit Circle Trigonometry
Ch 7 Trigonometric Functions (Wave Graphs)
~~Ch 8 Polynomial and Rational Functions~~
Ch 8 Complex (Imagionary) Solutions
Ch 8 Rationalizing the Denomenator
Ch 10 Probabilty and Counting (nPr, nCr,n^r...)
Ch 10 Compound Probability (And, Or, ~~If~~)
Ch 10 Expected Value
Apx C Describe a Distribution
Ch 9 Survey Design
Ch 9 Standard Normal Curve & Emperical Rule

Grades: Final grades will be based on the following percentages.

Homework, attendance, and participation .... ≤ 10 %
Quizzes, tests, and final exam...........................≥ 90 %

Letter Grade	Range		Letter Grade	Range
A	93-100		C	73-76.99
A-	90-92.99		C-	70-72.99
B+	87-89.99		D+	67-69.99
B	83-86.99		D	63-66.99
B-	80-82.99		D-	60-62.99
C+	77-79.99		F	00-59.99

Student will have two to three attempts on each chapter test. Each assessment provides a second and third attempt at the material. A composite score will be determined based on the most recent test score. Students are expected to clearly communicate their thinking in writing.