**Pre-Calculus Syllabus 2023-2024 School Year (Full Year)**

**Ms. Padilla**

**Office Hours: By Appointment Only**

**973-705-3847**

**Course Meeting Times:**

**Period 4 10:31 - 11:11 and Period 7 12:36-1:16**

**Kpadilla@nps.k12.nj.us**

**https://nboe.webex.com/meet/kpadilla**

Welcome to a new school year! I am excited to welcome your scholar to my Algebra II course. Our goal is to ensure that students are gathering a conceptual understanding and reaching mastery for the units to come. I will need your support in building your scholars' confidence and allowing them to embark on the journey of using self-discovery within the classroom environment. Studies show allowing students productive struggle with support is a great way to foster an environment for conceptual understanding.

|  |  |
| --- | --- |
| **Course & Grade Level** | Pre-Calculus - Grade 12 |
| **Room #** | 424 |
| **Course Description** | Pre-Calculus, as its name indicates, is designed to prepare you for Calculus, either in high school or college. Topics include understanding algebraic and polynomial functions, exponential and logarithmic functions, and conic sections. Students will also study applications of trigonometry, trigonometric identities and equations, mathematical induction, and the concept of limits. In addition to content mastery, the course goals are to further develop students’ problem solving and critical thinking skills. The difficulty level of the material increases significantly throughout the semester. Students should be prepared to be challenged and work hard. Students are encouraged to form study groups with peers, practicing beyond daily assignments in an effort to master skills. Technology will be incorporated throughout the curriculum. |
| **Required Materials** | Notebook, Pencil, Sharpener, Eraser, Folder, Graph paper, Loose sleeve paper, and Basic scientific calculator |
| **Policies & Procedures** | All students are required to adhere to Eagle Academy’s policies and procedures which can be found at <https://www.eaglenewark.com>.  Below you can find the class norms and rules. These have been put in place to ensure that students will be successful within the course. Failure to comply will result in a verbal warning, parent/guardian contact and meeting with administration.  Classroom Norms:   1. Welcome mistakes 2. Collaborate with your peers 3. Ask questions 4. Attempt different strategies   Classroom Rules:   1. Give respect to receive respect 2. Follow directions 3. No electronic devices 4. Remain on task |
| **Grading Policy** | **Category Percent of Grade**  Summative Assessments 70%  Formative Assessments 30%  **Summative Assessments** include, but are not limited to the following::  unit tests, performance based assessments, project based assessments, portfolios, essays, mid term and final examinations.  **Formative Assessments**  includes, but are not limited to the following:  Do nows, daily instructional tasks, homework, drafts of essays, quizzes, exit tickets, standards mastery performance tasks, class participation    Gradebook will be updated on Powerschool weekly |
| **Attendance & Tardiness Policy** | Attendance and punctuality are necessary for successful completion of this course. In the event that you have an excused absence it is your responsibility to obtain make-up work and/or reschedule any missed assessments. |
| **Assignments** | Please find the districts Pre-Calculus curriculum below: <https://docs.google.com/document/d/1ueLYbnJ6363NmN014Ws0alLiKYTnyV4-GfsT2JWxBrY/edit?usp=drive_web&authuser=0> |
| **Classwork & Homework Policies** | * All assignments must be turned in on time. Late assignments will be accepted under the following conditions: a) the assignment is submitted at the beginning of the next class session, immediately following the due date [10 points will be deducted from the earned grade] **AND** b) the assignment has not been reviewed in class or graded/returned by the teacher. |
| **Course Timeline** | |
| **MP #1:**  **Sept. 8 - Nov. 17** | Unit 1A: Functions and their graphs  Unit 1B: Polynomials and Rational Functions  Unit 1C: Exponentials and Logarithmic Functions  Unit 1D: Matrices and Systems of Equations |
| **MP#2:**  **Nov. 18 - Feb. 4** | Unit 2A: Trigonometry  Unit 2B: Trigonometry Functions and Graphs  Unit 2C: Analytic Trigonometry |
| **MP #3:**  **Feb 5 - Apr. 21** | Unit 3A: Conic Sections  Unit 3B: Polar Equations and Complex Numbers  Unit 3C:Vectors and Parametric Equations |
| **MP #4:**  **Apr. 22 - June 28** | Unit 4A: Sequences and Series  Unit 4B: Combinatorics  Unit 4C. Application of Limits |
| **Student Signature** |  |
| **Parent Signature** |  |
| **Incentivize** | Students will receive a 100% for the first HW assignment if this form is signed and returned to class by 9/11. |