# East Brunswick Magnet School AP Pre-Calculus\_

COURSE DESCRIPTION: AP Precalculus is designed to be the equivalent of a first-semester college precalculus course. AP Precalculus provides students with an understanding of the concepts of college algebra, trigonometry, and additional topics that prepare students for further college-level mathematics courses. Throughout the course, the mathematical practices of procedural and symbolic fluency, multiple representations, and communication and reasoning are developed. Exam Day: May 13, 2025

#### Exam Weighting for the Multiple-Choice Section of the AP Exam

Units	Exam Weighting
Unit 1: Polynomial and Rational Functions	30–40%
Unit 2: Exponential and Logarithmic Functions	27-40%
Unit 3: Trigonometric and Polar Functions	30-35%
Unit 4: Functions Involving Parameters, Vectors, and Matrices	Not assessed on the AP Exam

#### **CLASS MATERIALS:**

A dedicated notebook/binder or folder is suggested to organize notes.

Chromebook to use for online assignments and to access AP and Google Classroom.

**Graphing Calculator TI 84** if you have your own since there is a limited number of calculators in the classroom.

Technology will be used throughout the course as a tool to explore the following concepts:

- Perform calculations (e.g., exponents, roots, trigonometric values, logarithms)
- Graph functions and analyze graphs
- Generate a table of values for a function
- Find real zeros of functions
- Find points of intersection of graphs of functions
- Find minima/maxima of functions
- Find numerical solutions to equations in one variable
- Find regression equations to model data (linear, quadratic, cubic, quartic, exponential, logarithmic, and sinusoidal) and plot the corresponding residuals
- Perform matrix operations (e.g., multiplication, finding inverses)

It is important to note that technology should not replace the development of symbolic manipulation skills. Most of the AP Exam will need to be completed without the use of technology. However, selected multiple-choice and free response questions will require students to use a graphing calculator to complete the tasks delineated above.

### **Grading Policy**

Assessments 80%	Tasks and Practices 20%
<ul> <li>There is no teacher assistance</li> <li>Questions include multiple levels of difficulty including enrichment</li> <li>Completed in classroom under supervision</li> <li>Questions have not been given to students before</li> </ul>	<ul> <li>Classwork</li> <li>Homework</li> <li>Math practices check-in</li> <li>Online software assignments</li> </ul>

## **Grading**

• This is the grading system for the five-question quizzes:

Number of Problems Correct	Score	With Notes	Proficiency Level
0/5 (attempted)	10	10	Requiz
1/5	25	25	Requiz
2/5	50	50	Requiz
3/5	80	73	Proficient
4/5	90	83	Advanced
5/5	100	93	Mastered

## **Honors Level Reassessment Policy**

Reassessments will be permitted for non-passing grades. The maximum possible score for a reassessment will be an 80%.

Number of Problems Correct	Score
0/5 (attempted)	10
1/5	25
2/5	50
3/5	70
4/5 or 5/5	80

**CONTACT INFORMATION:** Feel free to email Mrs. Zajac at <u>zajacm@mcmsnj.net</u>.

**EXTRA HELP:** Tutoring is available before and/or after school during Homework Club. Struggling students will be encouraged to attend, so they have a successful year!