## Cocalico School District Year-at-a-Glance - Curriculum Overview

**Department: Math** 

Course: Pre-Calculus/ Trigonometry (135) Grade Le

Grade Level: 10-12

## **Big Ideas**

- Continue building foundations in real number systems, functions, exponentials, logarithms, and trigonometry.
- Utilize graphical and algebraic methods in the approach of the above topics.

| Units of Study   | % of Course<br>Time | Textbooks & Supplemental<br>Materials  | Assessments  | Standards Addressed  |
|--|---------------------|--|--|--|
| Algebra Review   | 10%                 | Precalculus: Graphical,<br>Numerical, Algebraic<br>Textbook Appendix A               | Chapter Test   | <ul> <li>CC.2.2.HS.D.3</li> <li>CC.2.1.HS.F.1-6</li> </ul>                           |
| Number Systems and<br>Linear Functions                   | 10%                 | Precalculus: Graphical,<br>Numerical, Algebraic<br>Textbook Pre-Requisite<br>Chapter | <ul><li>Chapter Quiz</li><li>Chapter Test</li></ul>                              | <ul> <li>CC.2.2.HS.C.3</li> <li>CC.2.2.HS.D.4-10</li> <li>CC.2.1.HS.F.3-6</li> </ul> |
| Functions and Graphs                                     | 18%                 | Precalculus: Graphical,<br>Numerical, Algebraic<br>Textbook Chapter 1                | <ul><li>Chapter Quiz</li><li>Chapter Test</li></ul>                              | <ul> <li>CC.2.2.HS.C.2</li> <li>CC.2.2.HS.D.4-10</li> <li>CC.2.1.HS.F.1</li> </ul>   |
| Polynomial, Power,<br>and Rational<br>Functions          | 12%                 | Precalculus: Graphical,<br>Numerical, Algebraic<br>Textbook Chapter 2                | <ul><li>Chapter Quiz</li><li>Chapter Test</li></ul>                              | • CC.2.2.HS.D.3-10   |
| • Exponential, Logistic,<br>and Logarithmic<br>Functions | 14%                 | Precalculus: Graphical,<br>Numerical, Algebraic<br>Textbook Chapter 3                | <ul><li>Chapter Quiz</li><li>Chapter Test</li></ul>                              | <ul> <li>CC.2.2.HS.C.5-6</li> <li>CC.2.2.HS.D.7-10</li> </ul>                        |
| Trigonometric<br>Functions                               | 19%                 | Precalculus: Graphical,<br>Numerical, Algebraic<br>Textbook Chapter 4                | <ul><li>Chapter Quiz</li><li>Chapter Test</li></ul>                              | Extension Beyond     Standards   |
| Analytic     Trigonometry                                | 17%                 | Precalculus: Graphical,<br>Numerical, Algebraic<br>Textbook Chapter 5                | <ul><li>Chapter<br/>Quizzes</li><li>Chapter Test</li><li>Proof Project</li></ul> | Extension Beyond<br>Standards  |



## **Eagle P.A.C.T. Course Connections:**

Pre-Calculus/Trigonometry encourages all students to work together and use problem-solving skills to solve various real-world applications, utilizing both graphing technology and paper/pencil approaches.