

Precalculus with Trigonometry Syllabus

RCAS Policies/Procedures

Students will be required to follow all RCAS policies and procedures. To view the RCAS High School Student Handbook, click [handbook](#).

Course Description

Precalculus with Trigonometry prepares a college-bound student for the first course in calculus. The course includes the study of advanced functions, including polynomial, exponential, logarithmic, trigonometric, and circular functions. Students will study the algebraic relationships between these functions, their graphs, and transformations of these functions. Students will also be introduced to the concept of limits.

Grading

Official grades will be kept in Skyward. Points shall be awarded for assignments, quizzes, and tests. Points will be awarded and collected cumulatively through the year.

Textbook

Precalculus with Trigonometry: Concepts and Applications by Foerster

Reading

None

Optional Reading

None

Instructional Resources

www.WebAssign.net – Online homework platform

Essential Questions

- Chapter 1 – I can use overarching concepts such as transformations, composition, and inverses to work with functions.
- Chapter 2 – I use shapes of graphs and patterns of tables to identify key characteristics and type of function.
- Chapter 4 – I can identify key characteristics of polynomial and rational functions.
- Chapter 5 – I can use the six trigonometric functions and inverse trigonometric functions to solve right triangle problems.
- Chapter 6 – I can expand the domain values of trigonometric functions to be all real numbers thus generating the corresponding circular functions.
- Chapter 7 – I know basic trig properties and can use them to prove trig identities and solve trigonometric equations.

- Chapter 8 – I know more complicated trig properties and can use them to prove trig identities and solve trigonometric equations.
- Chapter 9 – I can solve problems involving oblique triangles using law of cosines and law of sines.
- Chapter 10 – I can analyze conic sections using equations and graphs.

Essential Learning Intentions

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