

PRECALCULUS HONORS

MAT 341/342 • 2017-18

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available days and hours: Before school, after school by appointment.

Course description*

This course provides an intense study of the topics fundamental to calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic, and trigonometric functions. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. It is strongly recommended that students who intend to take Advanced Placement Calculus as seniors take PreCalculus Honors.

Credit weight*

Honors

[Link to published core curriculum map*](#)

Priority Standards*

Semester 1	Semester 2
Construct and compare linear, quadratic, and exponential models and solve problems	Extend the domain of trigonometric functions using the unit circle
Build new functions from existing functions	Model periodic phenomena with trigonometric functions
Understand the concept of a function and use function notation	Define trigonometric ratios and solve problems involving right triangles
Analyze functions using different representations	Prove and apply trigonometric identities
Perform arithmetic operations with complex numbers.	Define trigonometric ratios and solve problems involving right triangles
Use complex numbers in polynomial identities and equations.	Apply trigonometry to general triangles
Interpret functions that arise in applications in terms of the context	Represent complex numbers and their operations on the complex plane.
Use polynomial identities to solve problems	Represent and model with vector quantities.
Understand independence and conditional probability and use them to interpret data	Perform operations on vectors.
Use the rules of probability to compute probabilities of compound events in a uniform probability model	Solve systems of equations
Build a function that models a relationship between two quantities	Perform operations on matrices and use matrices in applications.
Represent and solve equations and inequalities graphically	Understand the concept of a function and use function notation
Represent complex numbers and their operations on the complex plane.	Interpret functions that arise in applications in terms of the context
Translate between the geometric description and the equation for a conic section	Analyze functions using different representations

Grading Categories* (Common for all instructors of this course)	Category Percent Weights* (Common for all instructors of this course)
Unit Assessments (Common for all instructors of this course)	50%
Formative Assessments	40%
Homework	10%

Leyden High School D212 Common Grading Scale*: 90 - 100 A; 80-89 B; 70 - 79 C; 60 - 69 D; Below 60- F

Grades in this class will be updated **weekly** (minimum) and are available via the [eSchool Home Access Center](#)

Materials Needed

- Chromebook
- Textbook Pitzer Precalculus
- TI-Nspire Calculator (supplied by school)

Retake/Late Work/Missing Assignment Policy

Assignments may be made up for full credit up through the day after the chapter exam that the assignments are associated with. Any assignment or assessment not completed by the deadline will be counted as a 0%. Any missing grades throughout the semester will be counted as 0% and will negatively affect the student's average for the course during progress.

Other information