SILSA Course Syllabus

Course Name: AP Precalculus
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Course Overview

AP Precalculus is designed as a survey of introductory college algebra topics that prepares scholars for future studies in elementary calculus. The course focuses on the analytical use of polynomial/rational, exponential/logarithmic, and trigonometric functions along with a brief introduction to polar coordinates and functions graphed in a polar plane, in direct alignment with the AP Precalculus Course and Exam Description. As an Advanced Placement course, students will have the potential to earn a college-level Precalculus credit with a successfully high score on the year-end AP Precalculus exam (scheduled for **Tuesday May 12, 2026**). As a course geared to college-level expectations, there will be a thorough focus on procedural and symbolic fluency, use of multiple forms of representation, and engaging in college-level appropriate mathematical communication and reasoning.

Semester 1 Units	**Semester 2 Units**
Unit 1 - Polynomial and Rational Functions Unit 2 - Exponential and Logarithmic Functions	Unit 3 - Trigonometric and Polar Functions Unit 4A - AP Exam Review Unit 4B (TBD) - Matrices, Vectors, and Parametric Functions

Essential Questions to Spark Student Inquiry

- Unit 1: How can we adjust known projectile motion models to account for changes in conditions?
- Unit 2: How can we adjust the scale of distance for a model of planets in the solar system so the relationships among the planets are easier to see?
- Unit 3: How do we model aspects of circular and spinning objects without using complex equations from the x-y rectangular-based coordinate system?

Assessment

Formative

Formative assessment will take many different shapes in this course - ranging from “exit ticket” understanding checks to problem solving discussion rubrics, skill mastery-oriented “checkpoints,” and integrated classroom protocols such as the “Fast and Curious” assessment technique. All formative assessments will be analyzed on a Strength of Evidence rubric that outlines specific outcomes students must achieve at each level of mastery on a four-tier scale.

Summative

In addition to the AP Precalculus exam, students will engage in a mix of projects, portfolio submissions, presentations, and unit-wide examinations to assess their cumulative acquisition of key learning targets at the culmination of each unit.

Grading

Assignments in this course are designed to align directly with specific learning targets. For each target, your grade will be calculated using a 65% weighting for your most recent work and 35% for older work, ensuring that your current understanding is prioritized. Your overall term grade will represent the average of all your target scores out of 10 points each. Students are encouraged to request additional opportunities to build and demonstrate mastery on any target until the end of each grading period. Throughout the course, you will receive regular and iterative feedback—both in-person and through Canvas—to guide the ongoing revision of tasks and support your continued growth toward mastery.

Grading Scale:
A = 90–100 | B = 80–89 | C = 70–79 | D = 60–69 | F = below 60

Late Work

- Work is due on the due date unless you have an excused reason.
- Late work is accepted only until the grading term ends.
- Missing work gets a zero (No Evidence) score until it's turned in—then it's graded normally.

Revisions and Progress Toward Mastery

- Assignments for a unit may be revised and resubmitted for full credit so long as they are submitted before the given unit ends.
- Formative assessments will be offered similar opportunities for revision based on specific teacher feedback.
- Students may re-attempt a summative exam for a unit after undergoing a corrections process for their prior attempt.
- Provided a scholar has completed all expected tasks within a unit and still wants to improve a specific target score, they may request additional opportunities to develop mastery evidence so long as they are submitted before the given marking period ends.

Attendance

Per Board of Education Procedure 3420-P: Students who exceed the number of absences to earn course credit must attend attendance recovery within two weeks of their last absence.

Per Board of Education Procedure 4400-P: To receive credit for a course, a student must not have more than five (5) unlawful class absences.

When a student must miss school, a written excuse signed by a parent or guardian must be presented to the student's teacher on the day the student returns after an absence. Absences due to extended illnesses may also require a statement from a health care practitioner.

Additional/Supplemental Information

Academic Integrity: Do your own work. Don't copy, cheat, or misuse math apps or AI tools (like Mathway, MathPapa, ChatGPT). Dishonesty = discipline + a zero on that task.

Bathroom/Hall Passes:

- No passes in the first or last 10 minutes of class.
- Use e-Hallpass for all trips.
- Passes can be denied if misused.

Device Use:

- No personal Internet-connected devices are allowed during class without permission **per state law.**
- Per school policy, students will surrender their device to a lockbox at the start of class to be returned at the end of class.
- Any infractions of this policy will result in immediate referral and contact home.

Food and Drinks:

- **Small snacks** are permitted as long as you don't leave a mess.
- Drinks in **sealable containers** are allowed.
- If it becomes a distraction, it goes away.
- **If you make a mess, clean it up - or EVERYONE will lose the privilege!**