

5-207 Form – Curriculum Adoption – Curriculum Research – Design for Course Approval

- I. Rationale** – In 2023, the College Board introduced an Advanced Placement Precalculus course. The purpose of the course is twofold: to provide a unified national curriculum for precalculus and also to provide a college-level, advanced placement course, with an associate AP exam, **for on-level math students** in high school. This is one of the fastest growing exams in the US. In 2024 (the first year of administration), there were 165,000 tests given. In 2025, there were 205,000 tests given. The prediction for this year is that there will be nearly 280,000 AP Precalculus tests given. Many other districts in Tucson have started offering this course. If we are to compete with nearby districts in offering a full slate of AP courses, it is important that we add this course to our curriculum.
- II. Description** – The goals of the course are to prepare students to be successful at whatever college-level course that they take next, whether it's an AP Calculus class in high school or a Calculus 1 class in college. A passing grade on the AP test will also grant students credit for precalculus in college, as well as placement into the appropriate next class. The curriculum is defined by a publication released by the College Board, "The AP Precalculus Course and Exam Description" (<https://apcentral.collegeboard.org/media/pdf/ap-precalculus-course-and-exam-description.pdf>), which includes a list of the full curriculum goals and objective. The perquisite for the course is successful completion of Algebra 1, Geometry, and Algebra II, regardless of level. The format is a tradition math course, with 3 specific units covered by the AP test, Polynomial and Rational Functions, Exponential and Logarithmic Functions, and Trigonometric Functions. Schools have the option to add a additional topics as needed.
- III. Articulation** – The course was developed in close conjunction with college math departments and high schools. It aligns very closely with the Arizona State Standards for Precalculus (<https://www.azed.gov/sites/default/files/2020/10/Arizona%20Precalculus%20Standards.pdf>). In addition, all three of the state universities grant college credit for scores of 3 (out of 5) or higher on the AP Precalculus test, provided students don't later take AP Calculus.
- IV. Audience** – The primary audience for this course is on-level students who plan to follow a career path in a STEM area, business, or social science. It is especially appropriate for students who haven't taken an honors math course previously. Data from the first examination (2024) shows that underrepresented groups took AP Precalculus in far greater numbers than any other AP math course, with more than 70% of the students earning college credit. This course is especially designed for schools that might not have a lot of students taking other AP math courses. While the audience is predominantly on-level seniors, the course can also function as a prerequisite for AP Calculus courses for non-seniors.

V. Resources – Teachers can continue to use the current text. The AP Precalculus community has created a large volume of shared materials, including note-takers, activities, homework, quizzes, and assessments, all available free of charge. No special materials are needed – students can use graphing calculators, or Desmos, a web site that is available for free on the internet, and is built into Bluebook, the College Board app that is used for AP and SAT testing. In addition, Chris Yetman, a math teacher at CDO, is a trained Precalculus consultant for the College Board and can provide low-cost training for teachers, eliminating the need for expensive AP Summer Institute fees.

VI. Outcome – Students will take the AP Precalculus test. In addition, achievement in following courses can be monitored. The College Board provides instructional planning reports that pinpoint student successes and failures on the AP test and these can be used to effectively improve instruction.

VII. Implementation

Timeline: Training provided during the summer of 2026
Pilot Courses at the three high schools during the 26-27 school year
PLTs used during the 26-27 school year (and beyond)
Full adoption in the 27-28 school year

VIII. Process – course was piloted at CDO during the 24-25 school year. Department chairs, teachers and district math specialist discussed modifying the current curriculum to replace some current courses with AP Precalculus.

Approval:

Principal _____ date _____

Superintendent _____ date _____

(Note: Must be submitted for Governing Board approval prior to the end of the current school year for implementation during the following school year.)