Middle and High School Course-Taking Pathways for Mathematics

The Arizona State Board of Education and the Catalina Foothills School District (CFSD) require four credits of mathematics coursework in grades 9-12 for graduation, as illustrated in Figure 1. For some students, high school mathematics will culminate after four courses: Algebra 1, Geometry, Algebra 2, and a fourth mathematics course credit beyond Algebra 2. The coursework presented in these mathematics courses represent a robust and rigorous course of study designed to adequately prepare students for their post-high school goals.

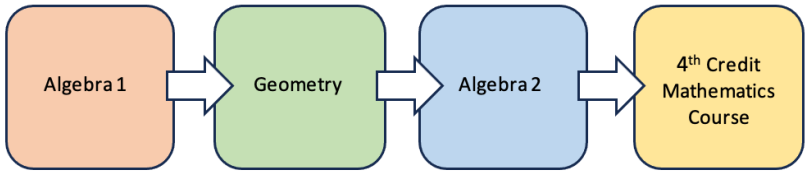

Figure 1: Mathematics Graduation Requirements for High School

Figure 2 is an illustration of 4th credit mathematics course options at Catalina Foothills High School (CFHS). Some students will pursue Honors and advanced mathematics courses beyond those included in the general pathways of study when it comes to choosing their pathway(s) to graduation. Students seeking placement in high school Honors courses must meet specific criteria/data points to ensure that they are prepared for higher-level math courses.

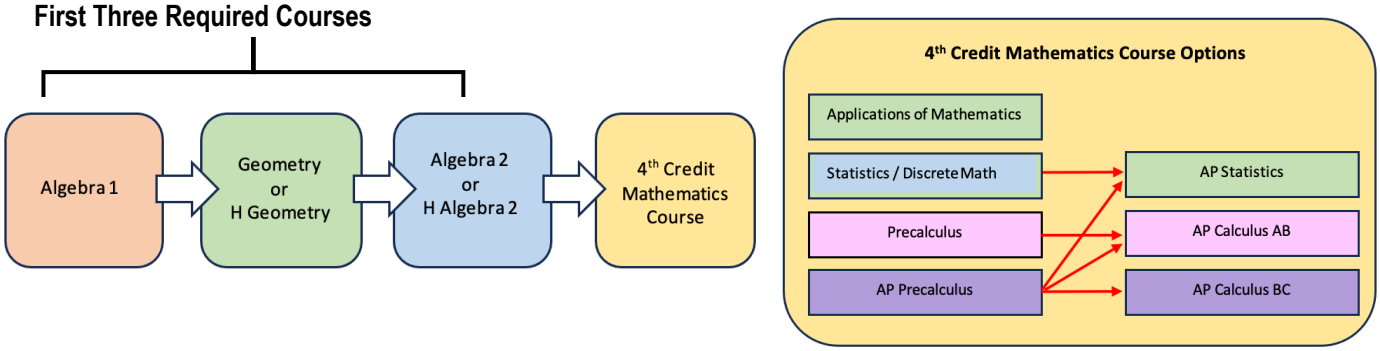

Figure 2: Mathematics Graduation Requirements and 4th Credit Course Options

Personal interests, strengths, and goals may change as students mature and matriculate through school. Therefore, there are multiple points at which students, parents, teachers, and counselors collaboratively analyze which mathematics course pathway(s) best aligns with students' post-high school goals. All students are encouraged to take mathematics courses at the highest level of challenge possible.

Figure 3 below illustrates multiple pathways for grades 6 through 12 that students may engage in to accomplish their mathematics course requirements for high school graduation and to prepare them for post-high school goals. Middle school students seeking placement in accelerated or high school Honors courses at the middle school level must meet placement criteria/data points.

Middle and High School Course-Taking Pathways for Mathematics

There are multiple course-taking pathways to support students as they work to accomplish their mathematics requirements for high school graduation and to prepare them for their post-high school goals.

Please note "decision point" on diagram: Students who take Math 8 Accelerated at grade 8 and Algebra 1 at grade 9 have the opportunity to take advanced courses such as Precalculus or AP Precalculus in their fourth year of high school. If students want to take courses such as AP Calculus AB or AP Calculus BC, they encounter a decision point after completing Algebra 2 or Honors Algebra 2. Students may choose to take PCC's MAT 18 and MAT 189 during the summer prior to senior year. Successful completion of these courses may allow them to enroll in AP Calculus.

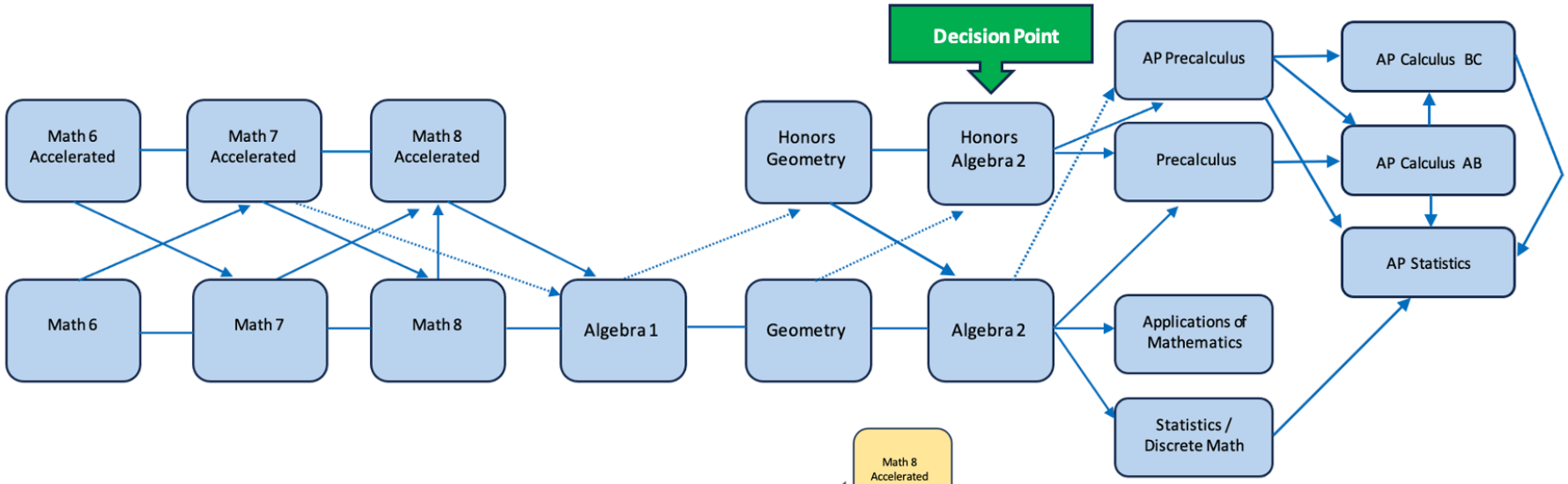

Figure 3: Grades 6-12 Mathematics Pathways

(1) The ·····▶ indicates specific criteria required (data points that may include demonstration of mastery of additional content) for students taking these paths.

(2) Sixth graders who successfully completed *Math 6 Accelerated* in fifth grade and met the required criteria will begin at *Math 7 Accelerated* in the pathways diagram above.

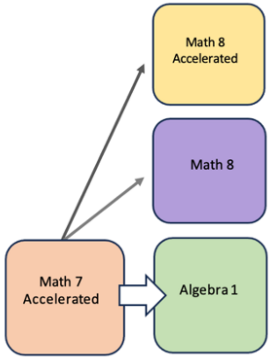

Figure 4: Middle School Math Placement Options After Completing *Math 7 Accelerated*