

# Common Core Math Implementation in the Acalanes Union High School District

## Frequently Asked Questions

1. **What are Common Core standards?**

Common Core is a set of college- and career-ready standards for kindergarten through 12<sup>th</sup> grade in English language arts/literacy and mathematics. Forty-eight states participated in the development of the Common Core standards and today, 43 states have voluntarily adopted and are implementing the standards. Common Core standards are designed to ensure students graduating from high school are prepared for two- and four- year college programs and the expectations of today's workforce.

2. **Did AUHSD have standards before the Common Core and if yes, how are they different?**

State of California adopted content standards in 1997 and the Acalanes Union High School District (AUHSD) adopted California Content Standards in all applicable content areas. Content standards provided the teachers guidance in what should be taught in each classroom. Common Core built on those standards, based on research and literature on what students need to know to be successful in college, career and life. In addition to the content, Common Core includes instructional practices to achieve deep mastery of the content.

3. **Will the Common Core standards affect AUHSD mathematics course offerings?**

4. Course offerings will not change as a result of Common Core. AUHSD will continue to offer full slate of course offerings in the area of mathematics.

All AUHSD math courses are undergoing curricular changes, change in the content and instructional practices as a result of the Common Core implementation.

5. **Will the AUHSD curriculum change in response to Common Core?**

Common Core math standards will affect the content in all math courses with the exception of Advanced Placement (AP) courses; Calculus AB, Calculus BC and Statistics. AP courses follow the curriculum set by the College Board and are updated as required by College Board. While much of the content in math courses will be the same as what was offered in the past, there are some significant shifts with topics being moved from Algebra 2 to Algebra 1, introduction of new transformation geometry in geometry courses, and standards involving probability and statistics. These are some examples of topics that will be shifting or being introduced to existing courses. Instructional practices are changing with the introduction of the 8 mathematical practices and new assessments in math.

6. **What is the difference between a traditional and integrated math pathway?**

Common Core mathematics framework suggests two possible pathways to address all math content standards; traditional or integrated pathway.

Following are high school courses for each pathway, grade 9-11.

Traditional:

*Algebra 1*

*Geometry*

*Algebra 2*

Integrated:

*Integrated Math I*

*Integrated Math II*

*Integrated Math III*

Both pathways will have students learning the same set of content standards and students will be assessed on those standards at the end of 11<sup>th</sup> grade when they participate in the Smarter Balanced Assessment.

AUHSD has selected the traditional pathway. Neither pathway is preferred and both are equally supported by the colleges and universities.

7. **What courses are considered to be at grade level in the Common Core math pathway?**

Following is the recommended Common Core math pathway:

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
CC Math 6	CC Math 7	CC Math 8	Algebra 1	Geometry	Algebra 2	Pre-Calculus

8. **If my child is an exceptional math student, how can he or she advance?**

There are two acceleration pathways for advanced (accelerated) math students; primary and secondary acceleration pathways. In the primary acceleration pathway, students accelerate in middle school. In the secondary acceleration pathway, students accelerate in high school.

9. **What is the preferred method of acceleration?**

AUHSD staff strongly recommends that acceleration occur in middle schools. High school Common Core math content is challenging and highly rigorous; therefore, acceleration can be additionally challenging.

10. **What does acceleration in middle school look like?**

AUHSD partner K-8 districts offer different acceleration pathways. Lafayette and Walnut Creek students can accelerate after 6<sup>th</sup> grade. Orinda and Moraga students can accelerate after 5<sup>th</sup> grade. All accelerated students in the partner districts, regardless of the timing of the acceleration, will have completed Common Core Algebra 1 standards in 8<sup>th</sup> grade and will take Geometry or Geometry Honors in the 9<sup>th</sup> grade. Please examine the [Partner District Acceleration Pathway diagram](#) for information on middle school course offerings and ways to accelerate.

11. **How are students selected to be on the accelerated pathway in middle school?**

Multiple measures are used to determine if a student is ready to accelerate in middle school. Acceleration in middle school involves taking three years of content in two years, which is a challenging option for advanced math students. Middle schools have developed a variety of measures consisting of benchmark and placement assessments, teacher recommendations, grades and parent requests to determine student readiness. Please contact your child's middle school staff members for specific information regarding the measures used to determine student readiness.

12. **If my child does not get accelerated in middle school, can he or she accelerate in high school?**

Yes. A student who did not accelerate in middle school has an option to do so in high school. AUHSD offers a pathway for students taking Algebra 1 in the 9<sup>th</sup> grade to accelerate and take Calculus in 12<sup>th</sup> grade. For specific courses involved in the AUHSD acceleration pathway, please see [AUHSD Math Pathways Diagram 2](#).

13. **If my child takes Algebra 1 in the 9<sup>th</sup> grade, can he or she still take Calculus in high school?**

Yes, a student taking Algebra 1 in the 9<sup>th</sup> grade can accelerate in high school through the AUHSD acceleration pathway. This involves taking a rigorous set of math courses and is recommended for students demonstrating advanced math skills in Common Core Algebra 1.

14. **Can a student take AUHSD summer school courses to advance in high school?**

Currently, AUHSD does not offer summer school courses for purposes of advancement. AUHSD summer school program is offered to current AUHSD students taking courses for credit recovery and students taking courses to improve grades.

15. **Should a student take Algebra 1 in summer school (not at AUHSD) to accelerate in math?**

AUHSD staff strongly discourages students from taking Algebra 1 in the summer for advancement purposes. Algebra 1 content is the basis of all other math courses in high school and beyond. To ensure student success in math, it is imperative that students take Algebra 1 course that is fully aligned to the Common Core standards and taught at the rigor expected of an AUHSD Algebra 1 course. AUHSD math teachers work closely with their math colleagues in all

four partner districts to ensure careful curricular alignment. To ensure that there are no gaps in the math content, it is crucial students take this course in high school (unless previously taken in middle school.)

16. **If a student takes Algebra 1 in summer school, will the course be accepted on the AUHSD transcript?**  
No. AUHSD transcript reflects courses taken in AUHSD schools only. Math courses taken outside of our district will not be included on the AUHSD transcript.
17. **If a student takes Algebra 1 in summer school after 8<sup>th</sup> grade, can he or she take Geometry in the 9<sup>th</sup> grade?**  
Yes, but the Algebra 1 course will not be on the transcript. This is highly discouraged and not recommended by the AUHSD staff. For the future success of the student, it is crucial that he or she take a course that is rigorous and fully aligned to the Common Core standards.
18. **Which math course can an entering 9<sup>th</sup> grader coming from a middle school that is implementing an integrated math pathway take?**  
Students entering AUHSD schools from middle schools other than Stanley, OIS, WCI or JM who have been on the integrated math pathway will be able to take the traditional course offerings at AUHSD. If the student was on the regular integrated pathway, he or she will take Algebra 1 as a 9<sup>th</sup> grader. If the student was on the accelerated integrated pathway, he or she may be ready to take Geometry as a 9<sup>th</sup> grader. Please work closely with your student's counselor or site administration on careful course selection.
19. **How many students accelerate in middle school and enter Geometry in high school?**  
An average of 40% of the students accelerate in middle schools and are ready to take Geometry in high school.
20. **What are the math pre-requisites for the science courses in the AUHSD?**  
AUHSD does not require specific course pre-requisites; however, staff strongly recommends following math courses when taking specific science classes.
- Biology – concurrent enrollment in Algebra 1 or higher
  - Chemistry – concurrent enrollment in Geometry or higher
  - Physics – concurrent enrollment in Algebra 2 or higher
  - Physics Honors – concurrent enrollment in Algebra 2/Trig or higher
  - AP Physics 1 – Concurrent enrollment in Algebra 2/Trig or higher
  - AP Physics C – Concurrent enrollment in Calculus
  - AP Chemistry – Concurrent enrollment in Algebra 2
21. **Does a student have to be enrolled in Geometry to take Biology?**  
No, students do not have to be enrolled in Geometry to take Biology.
22. **How many students take Calculus in AUHSD?**  
An average of 30% of seniors are enrolled in a Calculus course districtwide.
23. **What is the difference between Calculus AB and BC?**  
Following is the College Board answer to the question of what is the difference between Calculus AB and BC:

The difference between AP Calculus AB and BC is one of scope and not level of difficulty. AP Calculus AB includes techniques and applications of the derivative, the definite integral, and the Fundamental Theorem of Calculus. It is equivalent to at least a semester of calculus at most colleges and universities.

AP Calculus BC includes all topics in AP Calculus AB as well as additional topics, such as differential and integral calculus (including parametric, polar, and vector functions) and series. It is equivalent to at least one year of calculus at most colleges and universities. AP Calculus BC is an extension of AP Calculus AB, and each course is challenging and demanding and requires a similar depth of understanding of topics.

24. **What is the timeline to implement the Common Core standards?**

AUHSD teachers have begun the implementation of the Common Core standards in all courses. New topics have been included, instruction practices have been altered and assessments have been modified. The 2015-2016 school year will be the first year AUHSD will offer Algebra 1 course that is fully aligned to the Common Core standards. Implementation timeline has been developed with careful alignment to the partner districts. This alignment will ensure that students will not have gaps in their mathematical content knowledge. Following is an implementation timeline table for AUHSD math courses.

<i>School Year</i>	<i>Courses fully aligned to Common Core</i>
2013-2014	CC Math 6 CC Math 7 <i>*Middle School</i>
2014-2015	CC Math 6 CC Math 7 CC Math 8 <i>*Middle School</i>
2015-2016	<i>CC Math 6,7,8 (Middle School)</i> Algebra 1 (High School and Middle School) Algebra A Algebra B
2016-2017	<i>CC Math 6,7,8 (Middle School)</i> Algebra 1 (High School and Middle School) Algebra A Algebra B Geometry Geometry Honors
2017-2018	<i>CC Math 6,7,8 (Middle School)</i> Algebra 1 (High School and Middle School) Algebra A Algebra B Geometry Geometry Honors Algebra 2 Algebra 2 Trig Algebra 2 Trig Honors

*\*Courses written in black font are newly aligned to Common Core during that particular school year.*

25. **Will the state testing change in response to the Common Core standards?**

State of California will administer Smarter Balanced Assessment (SBA) to all students in grades 3-8 and grade 11. SBA will be administered on computer devices and will include multiple choice and free response questions. All AUHSD 11<sup>th</sup> graders will take a summative SBA math and literacy test during the week of May 18<sup>th</sup>. The assessment will be based on the Common Core standards.

26. **Will our students have new textbooks?**

AUHSD is currently reviewing and piloting several textbook programs in mathematics. In late spring of 2015, based on the results of the pilot programs, staff may recommend to the AUHSD Governing Board a textbook for adoption.

27. **How are the teachers being prepared and supported to implement the Common Core standards?**

AUHSD teachers have been participating in a variety of professional development opportunities. Teachers have participated in the districtwide Summer Institute, a three-day professional development opportunity in August. They have also participated in several mandatory and optional Professional Development days during the school year. All teachers meet every Wednesday morning to examine instructional practices, learn new teaching strategies, write curriculum and assessments, and more. Collaborative groups of teachers engage in Professional Development release

days to collaborate, examine the new standards, and develop lessons. A Common Core coach is available at each campus to help integrate the new standards and instructional practices in all classrooms.