Mathematics Graduation Curriculum Requirement

Information for Students, Families and Teachers

Students in the Class of 2014 and beyond need four credits of high school mathematics as one requirement to earn an Ohio high school diploma.

The only math course required in state law is Algebra II or its equivalent. The recommendation is that students complete Algebra II by the end of their third year in high school. Algebra II or its equivalent is the highest level math course required for graduation. The other three math credits must be high school level courses.

Meeting the graduation requirement of four math credits

Students may take any combination of high school and/or college level mathematics courses to earn the four credits of high school mathematics as long as one of the credits is Algebra II or its equivalent.

The fourth math course can, but does not need to be, higher than Algebra II or its equivalent. Suggested fourth math courses are pre-calculus, statistics, transitions to college algebra, computer science, AP Mathematics courses, trigonometry, quantitative reasoning and many Career-Technical Education courses. All courses must be at least high school level and be based on the content in Ohio's New Learning Standards.

*Ohio law provides flexibility**

Schools may offer several ways for students to learn and develop math skills and reasoning.

Offer a math support class in addition to the regular math class – Students take two separate math classes for one math course (example: geometry). The student takes the regular geometry class. At the same time, the student also takes a math support class in geometry in which an appropriately licensed mathematics/Highly Qualified Teacher provides extra support and teaching in geometry. The goal is to help the student keep up and succeed with the pace, rigor and accountability of the regular course. Credit is awarded for both classes, fulfilling up to two mathematics credits. The student earns credit proportional to the amount of time of the support class. For example, if the support class is 30 minutes, the student earns three fourths of a math credit when completing the support class. *

Complete a two-year math course – Teachers can modify instruction so that a math course (for example, Algebra II) is a two-year course. The content must be rigorous as defined by the New Learning Standards. The teacher uses teaching strategies that allows students more time to learn math differently. This approach to learning should include, but is not limited to, in-depth, hands-on opportunities for students to solve problems. Students achieve the same expected understanding of mathematics as in a traditional one-year math class. *

Extend the time of a math class – Students take a math course that is double the time of a typical class period. In many schools, districts handle this type of class through a block schedule. This allows more time during the class period for students to investigate problems and create solutions that help them develop mathematical understanding, skills and procedures. Students earn mathematics credit proportional to the time associated with the course. *

** The NCAA recognizes 1 credit per course for college admission and athletic eligibility. Please see NCAA handbook for further details.*

For students taking high school mathematics courses in middle school

Students who demonstrate an advanced understanding of key mathematical concepts may progress, or accelerate, to a higher course in math. The local school district establishes the criteria for placing students in a higher course. This means that students who are taking high school-level math courses in middle school have the opportunity to earn math credit(s) to meet math graduation requirements. **Pre-algebra classes in middle school do not qualify as a high school-level course to meet graduation requirements.**

The course must fulfill two requirements to receive high school credit:

- The local school board of education for the district determines that the course is high school-level content using the guidance of Ohio's New Learning Standards.
- An appropriately licensed mathematics teacher or HQT teacher (ORC 3912.22 & ORC 3319.222) teaches the course. Further clarification on teacher certification requirements is here.

Option to graduate without earning an Algebra ll or equivalent credit

During the third year of high school a student may decide that he or she is not prepared to achieve the higher level math course or is planning a career that does not require higher level math. The student, with agreement of parents, may choose to opt-out of the new high school curriculum for graduation. The opt-out provision is available only to the graduating Classes of 2014 through 2019. For more information click on Ohio Curriculum Choices.

Information for School Administrators

Ohio law permits students to earn graduation mathematics credit proportional to the time associated with the course. If a course is offered over two years, it is recommended that the first year utilize the respective Applied EMIS code followed by the typical course code. The Applied course codes may also be used for a full year course satisfying the graduation credit requirement.

High School Course – EMIS Code

- Applied Algebra - 110480 → Algebra I - 110301
- Applied Geometry - 110490 → Geometry - 111200
- Applied Mathematics - 110500 → Algebra II - 110302