

Frequently Asked Questions Restructured Additional Mathematics Courses

1. Why have the additional mathematics courses, designed to meet the state board requirement of four credits, been restructured?

For the past several years, there have been a wide variety of mathematics course offerings available to students to earn their fourth math credit after they have completed their three required mathematics courses. The State Board of Education, through the standards review process, has streamlined course offerings to provide greater equity and focus on students postsecondary goals. Restructuring these additional mathematics course offerings will help ensure that all students have the same opportunities for success, as well as shift focus from an ability-based pathway to a discipline- and career-based pathway.

2. What is the new Applied Mathematical Concepts course?

The new Applied Mathematical Concepts course is an additional mathematics course that will be implemented with the revised Mathematics Standards in the 2017-18 school year. Applied Mathematical Concepts is focused on application and modeling and has industry needs in mind. It is aligned to the ACT college- and career- readiness standards and contains content from Discrete and Finite Math. Topics include counting, combinatorics, probability, financial math, and linear programming. The Applied Mathematical Concepts standards are located [here](#) as a part of the revised Mathematics Standards document.

3. Will any mathematics courses be dropped in the 2017-18 revised Mathematics Standards?

Yes. Advanced Algebra/Trigonometry, Discrete Math, and Finite Math will be removed as accepted mathematics courses; thus, they are not included in the high school Mathematics Standards to be implemented in 2017-18.

4. How should high schools address what additional mathematics course(s) a student should take?

Decisions regarding appropriate placement are made locally and should be in the best interest of each individual student using multiple sources of data. As previously stated, the restructured shift is from an ability-based pathway to a discipline- and career-based pathway. Therefore, a student's postsecondary aspirations should be taken into consideration when determining additional mathematics coursework. For example, students who are entering a postsecondary degree program to pursue a STEM-related field may want to take Pre-Calculus and possibly Calculus. Students who are pursuing a non-STEM-related field, certificate program, or associates degree may want to take Applied Mathematical Concepts, which focuses on application and modeling in the real world. Also, students who are pursuing a non-STEM-related field may want to take Statistics, as most postsecondary majors for non-STEM-related fields require an entry-

level college Statistics course. School-based educators must thoughtfully review each individual student's needs and interests when working with the student to determine the appropriate course.

5. When is the next textbook adoption cycle for mathematics?

Textbooks and instructional materials for each subject are reviewed and approved on a six year cycle. The next local textbook adoption for Mathematics is in 2021. TDOE has developed an instructional materials screening instrument to aid districts in the selection of materials for the new Applied Mathematics course. This screening instrument will be posted for district use by Feb. 8, 2017.

6. How will the additional mathematics course offerings that students take beyond their required third mathematics course be addressed in the 2017 summer training?

The 2017 summer trainings will focus on the revised Mathematics and English language arts Standards. The restructured additional mathematics course offerings, including the new Applied Mathematical Concepts course, will be embedded in the training on the revised standards and will not be a stand-alone module. An overview and timeline of the summer training can be found [here](#).

7. Is the Applied Mathematical Concepts course National Collegiate Athletic Association (NCAA) approved?

Due to the diversity in teaching methodology and structure of high schools and secondary programs, the NCAA requires each high school and/or district to individually submit a number of documents for the approval of new courses like this Applied Mathematics Course. To submit the Applied Mathematical Concepts course for NCAA approval, access the high school portal at eligibilitycenter.org. For additional questions, please call the NCAA Eligibility Center at (877) 622-2321.