# DEPARTMENT OF MATH, SCIENCE, AND TECHNOLOGY

# FREQUENTLY ASKED QUESTIONS

## Do you use the Common Core Standards?

As a private school, we do not need to adhere to the Common Core Standards. Our curriculum is designed to benefit students who come from districts that have used Common Core as well as those that have not. We consult the standards, but have developed a curriculum that matches our students' needs. We focus on learning, not standards, but our students are well-prepared to take college entrance exams and succeed in college.

# What AP classes do you offer in the department of Math, Science, and Technology?

AP Calculus AB, AP Calculus BC, AP Computer Science A, and AP Statistics. Some students may be prepared to take the AP Physics I or AP Chemistry test after completing upper-level science classes.

#### How many math and science credits are required for graduation?

3 credits for math and 3 credits for science are required. Most students take 4 years of math, with some taking 5 credits. Many students take a fourth year of science.

#### Which calculator do students use?

Underclassmen use the Texas Instruments Nspire CX calculator. This calculator is allowed on all standardized tests. In upper level math classes, there is an option to upgrade to the Texas Instruments Nspire CX CAS. The CAS version is allowed on the SAT, but not the ACT.

#### Do you have laboratory science classes?

Yes, we currently offer 5 laboratory-based science classes. We have also upgraded our laboratory capabilities with a major science lab renovation. Furthermore, we have expanded our science curriculum this year with four new science classes that include Scientific Discourse and Debate, Upper Level Health, Astronomy, and Plagues, Pests, and Politics.

## Do you have honors classes in Math, Science, and Technology?

We currently do not have any honors level science classes. Most math classes are offered at both regular and honors levels.

#### Do you offer summer classes in math and science?

No, but several students who want to get ahead in math take classes from their home districts.

### What courses are offered in the Department of Math, Science, and Technology?

Algebra I, Honors Algebra I, Geometry, Honors Geometry, Algebra II, Honors Algebra II, Precalculus, Honors Precalculus, Discrete Math, AP Calculus AB, AP Calculus BC, AP Statistics, AP Computer Science A, Biology, Chemistry, Physics, Astronomy, Health and Wellness, Plagues, Pests, and Politics, Anatomy and Physiology, and Scientific Discourse and Debate.

Full list of course offerings at chicagoacademyforthearts.org/math-department



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### How is an honors math class different from a regular math class?

The honors section of each math class typically goes at a faster pace than the regular section. This means that more topics are covered and some topics are covered at a deeper level. It is possible to move between levels, although some extra work may be required to enter an honors class.

# Can my student take an AP math course if they start in Algebra I as a freshman?

Yes! The prerequisites for AP Statistics and AP Computer Science Principles are Algebra II and the consent of the instructor. Therefore, if your student does well in Algebra II, there are two possible AP courses they may take their senior year.

### What support do you provide students outside of class?

Most of the teachers in the department of Math, Science, and Technology are available before and after school. Our department works closely together, so students can get help from any teacher in the department during their free period, even if it is not their regular teacher. We have several online sources for students to consult as well.

# Do you have a math team?

We do! Even though our students have very busy schedules, we participate in the Mathworks Math Modeling Challenge each year. Thousands of teams compete for scholarship prizes in this applied math competition.



