

## Honors vs College Prep (CP) for Math

**Math:** Based on performance on the Math Placement Exam, incoming freshmen are eligible to place into the following classes. Students who want to re-take the placement exam may do so after completing the Summer Bridges Enrichment.

### **Algebra I College Prep:**

Students can expect to have lessons presented that will require them to take notes (writing and completing example problems related to the new content). The notes may be electronic slide shows, videos, traditional work off of the white board, or by other means. The content will be of a standard Algebra 1 level with frequent quizzes and formative assessments throughout a unit leading up to a unit assessment. Students who earn the privilege can earn points back by completing test corrections for 25% of their missed points within the allotted time frame.

- **Homework:** Homework will be given regularly following presentation of new material. A typical assignment will require students to work in class and complete any unfinished work at home. Assignments are designed to be completed within 30-45 minutes. The students will have ample opportunities to receive assistance both in and outside of class if they have questions. Time is usually allotted at the beginning of each class for students to ask questions on the previous day's assignment. Periodically, assignments may be given using websites such as IXL Math, Khan Academy, etc.

### **Algebra I Honors:**

The content will be the same as Algebra 1 CP, but, the rigor of the questions will be more difficult and students can expect to be challenged with higher level problems that require more in depth analysis as well as more independent work. The number of questions on an assignment may not be any more than a student in a CP course, but may take them longer to complete due to the higher level of rigor. Teachers will be available for assistance both in and outside of class, but students in an honors level math class will be expected to work more independently. The help that students receive may not be as direct as in a CP class but rather more of an attempt to guide the students to coming to their own correct conclusion regarding their questions.

Students who earn the privilege will be able to complete re-tests (only the problems they miss on the original test) and earn up to 50% of their missed points back.

Currently, there is a different textbook used for Honors than there is for CP to help provide more rigorous questions and deeper study of the concepts in Algebra.

- **Homework:** The amount of homework will most likely be similar to a CP class, but the level of difficulty will be more challenging and could require more time to complete. Students may find it necessary to look into additional resources outside of class to ensure their understanding of the material. Periodically, assignments may be given using websites such as IXL Math, Khan Academy, etc.

### **What is similar?**

- The scope and sequence is the same at the freshman level.
- The manner of homework is generally the same.

### **Algebra I/Geometry Honors:**

Students who qualify for this pathway understand that they are replacing one of their freshman elective courses with one of these classes in order for them to complete three trimesters of math during their freshman year. This class is designed for those students who, although they may have tested well on our placement exam, didn't score high enough to test out of Algebra 1 completely. The first trimester covers the second half of the Algebra 1 curriculum (the most difficult topics) allowing the students to really solidify their understanding. We feel that Algebra 1 is the most important curriculum for students to master and that while Calculus is a very difficult class, the hardest part of Calculus is the Algebra skills that students either never learn or forget. The content will be the same as Algebra 1 CP, but, the rigor of the questions will be more difficult and students can expect to be challenged with higher level problems that require more in depth analysis as well as more independent work. The number of questions on an assignment may not be any more than a student in a CP course, but may take them longer to complete due to the higher level of rigor. Teachers will be available for assistance both in and outside of class, but students in an honors level math class will be expected to work more independently. The help that students receive may not be as direct as in a CP class but rather more of an attempt to guide the students to coming to their own correct conclusion regarding their questions.

Students who earn the privilege will be able to complete re-tests (only the problems they miss on the original test) and earn up to 50% of their missed points back.

Currently, there is a different textbook used for Honors than there is for CP to help provide more rigorous questions and deeper study of the concepts in Algebra.

- **Homework:** The amount of homework will most likely be similar to a CP class, but the level of difficulty will be more challenging and could require more time to complete. Students may find it necessary to look into additional resources outside of class to ensure their understanding of the material. Periodically, assignments may be given using websites such as IXL Math, Khan Academy, etc.

### **Geometry Honors:**

The second and third trimesters of the three trimester requirement for this course are focused on completing our Honors Geometry curriculum. As in Algebra, the Honors course uses a different textbook than the CP level course. The textbook used in the Honors Geometry class provides many more opportunities for students to work through traditional formal proofs that involve statements/reasons and require the students to memorize a significantly larger amount of geometric definitions, postulates, theorems and formulas than students in a CP Geometry course. The differences between Honors Geometry and CP Geometry are very similar to the differences between Algebra 1 Honors versus Algebra 1 CP ...

The content will be the same as Geometry CP, but, the rigor of the questions will be more difficult and students can expect to be challenged with higher level problems that require more in depth analysis as well as more independent work. The number of

questions on an assignment may not be any more than a student in a CP course, but may take them longer to complete due to the higher level of rigor. Teachers will be available for assistance both in and outside of class, but students in an honors level math class will be expected to work more independently. The help that students receive may not be as direct as in a CP class but rather more of an attempt to guide the students to coming to their own correct conclusion regarding their questions, especially regarding formal proofs.

Students who earn the privilege will be able to complete re-tests (only the problems they miss on the original test) and earn up to 50% of their missed points back.

- **Homework:** The amount of homework will most likely be similar to a CP class, but the level of difficulty will be more challenging and could require more time to complete. Students may find it necessary to look into additional resources outside of class to ensure their understanding of the material. Periodically, assignments may be given using websites such as IXL Math, Khan Academy, etc.

### Sample Math and Science 4-year Plans for students

|                    |   |                  |                              |   |
|--------------------|---|------------------|------------------------------|---|
| <b>TRADITIONAL</b> | 9 <sup>th</sup>                                 | 10 <sup>th</sup> | 11 <sup>th</sup>             | 12 <sup>th</sup>  |
|                    | Math<br><b>Algebra I**</b>                      | Geometry**       | Algebra II**                 | Pre-Calc/Trig** or Statistics**                             |
| Science            | <b>Physical Science**</b>                       | Biology**        | Chemistry**                  | Physics**, AP Bio, AP Chem or Science electives             |
| <b>ADVANCED*</b>   | 9 <sup>th</sup>                                 | 10 <sup>th</sup> | 11 <sup>th</sup>             | 12 <sup>th</sup>  |
|                    | Math<br><b>Algebra I/Geometry or Geometry**</b> | Algebra II**     | Pre-Calc/Trig**              | <b>AP Calculus or Calculus**</b>                            |
| Science            | <b>Biology**</b>                                | Chemistry**      | Physics**, AP Bio or AP Chem | Physics**, AP Bio, AP Chem, AP Physics or Science electives |

\*Must take the Math & Science Placement tests to be considered.

\*\* Math and Science H placements available in both tracks