## Course Progression and Recommendations for ALL MATH classes

Where you are and where can you go from there.

## Graduation Requirements for MATH

- Algebra 1
- You must also pass the Algebra 1 EOC
- Geometry
- You must also sit for Geo EOC test
- 2 additional Math course
- Algebra 2 is required for all 4 -year colleges
- Computer Science Principles and AP computer Science Principles can count as a Math or an elective but not both. They can only count for a math for graduation purposes only. Bright Futures or 4-year colleges do not accept it as a math, just as an elective.


## Quick view:

ZHS TYPICAL MATHEMATICS SUGGESTED COURSE PROGRESSION

|  | Community/ Technical/ Military |  |  | 4 year University Degree |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average Math Grades | nd Test Scores | Above Average Math Grades and Test Scores | Average or Above Math Grades and Test Scores | Advanced Math Grades and Test Scores | Double Advanced Math Grades and Test Scores |
| Freshman | Algebra 1 |  | Algebra 1 Honors | Algebra 1 or Algebra 1 Honors | Geometry Honors | Algebra 2 Honors |
| Sophomore | Geometry |  | Geometry Honors | Geometry or Geometry Honors | Algebra 2 Honors | AP Pre-Calculus/AP Statistics |
| Junior | Math for College Algebra | Algebra 2 | Algebra 2 Honors | Algebra 2 or Algebra 2 Honors | AP Pre-Calculus | AP Calculus |
| Senior | Math for Data and Financial Literacy/ Math for college stats | Math for college stats or Math for data and finance or Prob and Stats honors | Prob/Stats H/AP Pre-Calculus/ Dual Enrollment | Prob/Stats H/AP PreCalculus/Dual Enrollment | AP Calculus/AP Statistics | AP Statistics |

## You are in Algebra 1... You can go to:

- Geometry or Geometry Honors
- Honors will be decided by student, parents and teacher based on grades, work ethic, and willingness to work.


## You are in GEOMETRY... You can go to:

1. Algebra 2

- Algebra 2 is required for all 4-year colleges
- Algebra 2 is also a prerequisite for Prob and Stats, AP Stats, Pre-calc, and AP Calc

2. Math for College Algebra

- MCA is a course that will build up Algebra 1 skills. It is considered an in between of Algebra 1 and Algebra 2. Building Algebra 1 skills to be better successful in Algebra 2.


## You are in Math for College Algebra... you can go to:

## 1. Algebra 2

- Algebra 2 is required for all 4year colleges
- Algebra 2 is also a prerequisite for Prob and Stats, AP Stats, Pre-calc, and AP Calc

2. Math for Data and Financial Literacy

- This is a class that is like an applied algebra math class. This class will look at data and financial applications of the math we learn in high school. There will be a lot of word problems and projects in this class

3. Math for College Statistics

- This is a class that is like an applied algebra math class. This class will look at data and statistics. Students will be extending understanding of probability using data and various representations, including two-way tables and Venn Diagrams.


## You are in Algebra 2... You can go to:

## 1. Probability and Statistics Honors

- This course is an introduction to probability and data analysis. Students will use appropriate techniques to display data, study patterns, test hypotheses, and draw conclusions from data. Basic but strong mathematical knowledge as well as strong reading skills are needed. Algebra 2 is a prerequisite course.


## 2. AP Precalculus

- This course is required prior to taking AP Calculus. It will cover a more advanced look into the Algebra 2 content, trigonometry. Algebra 2 or Algebra 2 Honors is a prerequisite for this course.


## 3. AP Statistics

- This course requires a student sit for the AP exam (or repay the school the AP exam fee). READING is a necessity for success in AP Stats so students enrolling should possess strong reading skills as well as strong math skills. Algebra 2 is a prerequisite for this course.


## 4. Math for Data and Financial Literacy

- This is a class that is like an applied algebra math class. This class will look at data and financial applications of the math we learn in high school. There will be a lot of word problems and projects in this class.


## 5. Math for College Statistics

- This is a class that is like an applied algebra math class. This class will look at data and statistics. Students will be extending understanding of probability using data and various representations, including two-way tables and Venn Diagrams.


## You are in Prob/Stats...

## you can go to:

## 1. AP Precalculus

- This course is required prior to taking AP Calculus. It will cover a more advanced look into the Algebra 2 content, trigonometry. Algebra 2 or Algebra 2 Honors is a prerequisite for this course.


## 2. AP Statistics

- This course requires a student sit for the AP exam (or repay the school the AP exam fee). READING is a necessity for success in AP Stats so students enrolling should possess strong reading skills as well as strong math skills. Algebra 2 is a prerequisite for this course.

Dual enrollment is also an option after Prob and Stats
But the student must meet the requirements of PHSC

## You are in Pre-Calculus...

## You can go to:

## 1. AP Calculus

- The course requires a student sit for the AP Exam (or repay the school the AP exam fee). Students who take this course are adept at both math and study skills and are looking to pursue a STEM major in college. AP Calculus $A B$ is equivalent to a Calculus 1 course in college and AP Calculus BC is equivalent to both a Calculus 1 and Calculus 2 course in college.


## 2. AP Statistics

- This course requires a student sit for the AP exam (or repay the school the AP exam fee). READING is a necessity for success in AP Stats so students enrolling should possess strong reading skills as well as strong math skills. Algebra 2 is a prerequisite for this course.


## Graduating Early

## Dual Enrollment

- If you are attempting to graduate early, you need to be co-enrolled in ALGEBRA 2 and one of the courses below:
- Math for Data and Finance
- Math for College Statistics
- To take Dual enrollment class, you must meet all the requirements of PHSC.
- Students must maintain at least a 3.0 unweighted high school GPA and the 2.0 postsecondary GPA specified in the Dual Agreement Articulation Agreement for continued eligibility to participate in college credit dual enrollment courses. Students may be removed from dual enrollment courses if their GPA falls below the required 3.0.
- Achieve a passing score for Reading, Writing, and Math on either the PERT, ACT, or SAT exams


## Computer Science Classes

- Computer Science classes can count towards your math credits for graduation but WILL NOT count as a math class for Bright Futures or for a 4-year college
- You have two class options currently offered:

| Computer Science Principles | AP Computer Science Principles |
| :--- | :--- |
| This course covers a broad look at what | This course mainly looks at programming <br> programming can do. This course looks <br> and how digital principles affect the |
| at how math relates to gaming principles | world around you. This course uses <br> and graphic designs used in 3D printing <br> and Laser engraving. |
| scratch and python to complete course <br> work. |  |

