## A Parent's Guide to Heritage High School Math <br> Rising 9 $^{\text {th }}$ Course Progression

Below are the most common progressions for mathematics. Each student is different and learns at a different rate. At Heritage High School, it is our goal to accommodate each individual student to learn mathematics in a class that is appropriate for the individual so he/she may get the best math education possible.

| Current Course $8^{\text {th }}$ grade | $9^{\text {th }}$ grade | $10^{\text {th }}$ grade | $11^{\text {th }}$ grade | $12^{\text {th }}$ grade |
| :---: | :---: | :---: | :---: | :---: |
| Math 8 <br> Developing Level | Algebra 1 | FADA or Geometry | Geometry or FADA | Algebra 2 |
| Math 8 Mastery Level | Algebra 1 | Geometry | Algebra 2 | AFM, Pre-Calculus, Multiple options |
| Algebra 1 <br> Learning Level | Expunge and repeat Algebra 1 | Geometry or FADA | FADA or Geometry | Algebra 2 |
| Algebra 1 <br> Developing Level | Expunge and repeat Algebra 1 | Geometry | FADA or Algebra 2 | Algebra 2 <br> AFM, Pre-Calculus, or Multiple Options |
| Algebra 1 <br> Mastery Level | Geometry | Algebra 2 | Pre-Calculus | College Preparatory Calculus - new course <br> AP Calculus AB or <br> Multiple options. |
| Geometry <br> Learning Algebra | Algebra 2 | AFM | Pre-Calculus | College Preparatory Calculus Multiple Options |
| Geometry Developing Algebra | Algebra 2 | Pre-Calculus | College Preparatory Calculus AP Calculus AB or Multiple Options | AP Calculus AB AP Calculus BC or Multiple Options |
| Geometry <br> Mastery Algebra <br> Passion for math \& science? <br> Pass Advanced Score on <br> Algebra 1 \& Geometry SOL? | Algebra 2/Trig** | Math Analysis | College Preparatory Calculus AP Calculus AB, AP Calculus BC, or Multiple Options | AP Calculus AB, AP Calculus BC, Multivariable Calculus, or Multiple Options |
| Algebra 2/Trig Developing Level | Repeat Algebra 2 | AFM or Pre-Calculus | Pre-Calculus, College Preparatory Calculus, AP Calculus AB, or Multiple Options | College Preparatory Calculus AP Calculus AB, AP Calculus BC, or Multiple Options |
| Algebra 2/Trig Mastery Level | Pre-Calculus | College Preparatory Calculus <br> AP Calculus AB or AP Calculus BC | AP Calculus AB, AP Calculus BC, Multivariable Calculus or Multiple Options | AP Calculus BC, Multivariable Calculus or Multiple Options |
| Algebra 2/Trig <br> Exceptional student Passion for math \& science? <br> Pass Advanced Score on Algebra 2 SOL? | Math Analysis | College Preparatory Calculus <br> AP Calculus AB or AP Calculus BC | AP Calculus AB, AP Calculus BC, Multivariable Calculus or Multiple Options | AP Calculus BC, Multivariable Calculus or Multiple Options |

## NOTES:

* Algebra Applications counts as a general elective and not as a math credit.
- FADA - Functions, Algebra, and Data Analysis:
o This is a good crossover course for those coming out of Algebra 1 "Learning Level" but not yet ready for Geometry. These students may have struggled in Algebra 1 or may have failed the Algebra 1 SOL test.
o This is a good crossover course for those coming out of Geometry but not yet ready for Algebra 2. These students may have struggled in Geometry and Algebra 1 or they may have seen success in Geometry but struggled in Algebra 1.
- AFM - Advanced Functions and Modeling:

O This is a good crossover course for those coming out of Algebra 2 but not quite ready for Advanced Algebra (Pre-Calculus).

- "Multiple Options" includes Computer Math, AP Computer Science, AP Statistics, and Statistics/Discrete Math.
- "Mastery level" student refers to those who are being very successful in the current class without the need for tutoring and/or retakes on assessments.
o These students should be independent learners and can manipulate fractions and decimals without a calculator. (i.e.: They have good number sense).

0 These students know how to graph parent functions and their transformations with and without a TI-84.
**In order to take Algebra 2 with Trigonometry the student should have
0 achieved an A in both Algebra 1 and Geometry without tutoring or retakes.
o passed both SOL End Of Course Tests earning "Passed Advanced" on both.
Algebra 2/Trig is a very fast-paced and rigorous course designed for students who excel in mathematics.

## Electives:

- Computer Math is another math elective. The co-requisite is Algebra II. After this, you may take AP Computer Science.
- Statistics is another math elective. The pre-requisite for AP Statistics is Algebra II, however a student may take Probability and Statistics/ Discrete Math before AP Statistics.
- Dual Enrollment Multivariable Calculus: A student will only earn a Dual Enrollment credit and the 0.5 weighted bump in his/her GPA if he/she has earned at least a $\underline{3}$ on the AP Calculus BC exam and successfully completes the course.


## Other things to consider:

- Does the student have a love for math and science?
- What will the student's schedule include? How many honors classes?

How many Advanced Placement classes? How many dual enrollment classes?

- What extra-curricular events or responsibilities would affect the time available for studies?

> Mrath is not a spectator sport!

Please, encourage your student to attempt all work, be on task, ask questions, and form study groups.
If you have questions about your student's recommendation, please contact your student's teacher or the Heritage Mathematics Department Chair, Rita Driskill.

