## Fairfax County Public Schools

## MATHEMATICS ACADEMIC SEQUENCE OF COURSES K-12 -- AP PYRAMIDS

| ELEMENTARY SCHOOL | MIDDLE SCHOOL |  | HIGH SCHOOL |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades K -6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| Curriculum defined by: <br> - Program of Studies (POS) of Fairfax County Public Schools <br> - Standards of Learning (SOL) of Commonwealth of Virginia | Mathematics 7 | Prealgebra | Algebra 1 | Geometry | AFDA ${ }^{5}$ <br> or <br> Algebra 2 | Algebra 2 <br> or <br> Precalculus <br> or <br> Mathematics <br> Elective ${ }^{6}$ |
| Content includes: <br> - Numerical Relationships <br> - Operations <br> - Measurement <br> - Geometry <br> - Data Analysis, Statistics and Probability <br> - Patterns, Functions, and Algebra | Mathematics 7 <br> Honors <br> or <br> Mathematics 7 | Algebra 1 or <br> Algebra 1 Honors | Geometry <br> or <br> Geometry Honors | Algebra 2 <br> or <br> Algebra 2 Honors | Precalculus ${ }^{2}$ <br> or <br> Precalculus <br> Honors ${ }^{2}$ <br> or <br> AP Precalculus | AP Calculus AB <br> or <br> AP Calculus BC ${ }^{4}$ <br> or <br> Mathematics <br> Elective ${ }^{6}$ |
| Advanced Math Curriculum | Algebra 1 Honors ${ }^{1}$ | Geometry Honors | Algebra 2 Honors | Precalculus Honors ${ }^{2}$ | AP Calculus BC | Multivariable Calculus ${ }^{3}$ |

1. Students enrolling in Algebra $\mathbf{1}$ Honors in $7^{\text {th }}$ grade must meet placement criteria.
2. Precalculus and Precalculus Honors include Trigonometry.
3. Multivariable Calculus is a one semester course followed by Matrix Algebra.
4. The prerequisite for AP Calculus BC is Precalculus Honors or AP Precalculus.
5. AFDA is Algebra, Functions, and Data Analysis and may be considered a bridge course to Algebra $\mathbf{2}$ for students needing additional support in mathematics. Students may also take Prob-Stats after AFDA.
6. Mathematics Electives vary by school and include: Trigonometry (semester), Probability and Statistics (semester or year), Discrete Math (semester or year), Data Science (semester or year), Applied Calculus, AP Statistics, AP Computer Science A, AP Computer Science Principles.

## Fairfax County Public Schools <br> MATHEMATICS ACADEMIC SEQUENCE OF COURSES K-12 -- IB PYRAMIDS

| ELEMENTARY SCHOOL | MIDDLE SCHOOL |  | HIGH SCHOOL |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades K -6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| Curriculum defined by: <br> - Program of Studies (POS) of Fairfax County Public Schools <br> - Standards of Learning (SOL) of Commonwealth of Virginia <br> Content includes: | Mathematics 7 | Prealgebra | Algebra 1 | Geometry | $\mathrm{AFDA}^{4}$ <br> or <br> Algebra 2 | Algebra 2 or <br> IB Math <br> Applications 1 <br> or <br> Mathematics Elective ${ }^{5}$ |
| - Numerical Relationships <br> - Operations <br> - Measurement <br> - Geometry <br> - Data Analysis, Statistics and Probability <br> - Patterns, Functions, and Algebra | Mathematics 7 or Mathematics 7 Honors | Algebra 1 or Algebra 1 Honors | Geometry or Geometry Honors | Algebra 2 or Algebra 2 Honors | IB Math Applications 1 or IB Math Analysis 1 | IB Math <br> Applications SL 2 or HL 2 or <br> IB Math <br> Analysis SL 2 or HL 2 |
| Advanced Math Curriculum | Algebra 1 Honors ${ }^{1}$ | Geometry Honors | Algebra 2 Honors | IB Math Applications 1 or IB Math Analysis 1 | IB Math Analysis 1 or <br> IB Math Analysis HL 2 | IB Math Analysis HL 2 or <br> Multivariable Calculus ${ }^{2,3}$ |

1. Students enrolling in Algebra 1 Honors in $7^{\text {th }}$ grade must meet placement criteria.
2. Students pursuing this sequence would need to take the IB Math Analysis HL exam at the end of $12^{\text {th }}$ grade.
3. Multivariable Calculus is a one semester course followed by Matrix Algebra.
4. AFDA is Algebra, Functions, and Data Analysis and may be considered a bridge course to Algebra $\mathbf{2}$ for students needing additional support in mathematics. Students may also take Prob-Stats after AFDA.
5. Mathematics Electives vary by school and include: Trigonometry (semester), Probability and Statistics (semester or year), Discrete Math (semester or year), Data Science (semester or year), Applied Calculus, AP Statistics, IB Computer Science.
