

## Math Department Courses

Honors, College in the High School, Advanced Placement

Why take advanced courses?

Link to video: <https://youtu.be/pnU2AzTNzYI>

### **Honors Geometry:**

Link to video: [https://www.youtube.com/watch?v=\\_TAIETB77XM](https://www.youtube.com/watch?v=_TAIETB77XM)

Description: This course is designed to support students in delving deeper into geometric concepts and skills, pursue extensions and enrichment topics and to create their own applications. The course covers logic, inductive and deductive reasoning, forming proofs, congruence, similarity, polygons, construction, loci, coordinate geometry, transformations, area, volume, and right triangle trigonometry.

### **Honors Algebra 2:**

Link to video: <https://www.youtube.com/watch?v=YEuD9fBIVwY>

Description: Honors Algebra 2 has a much faster pace than regular Algebra 2. Each topic is covered more in depth than regular Algebra 2 and additional topics are covered as well. These additional topics include matrices, conic sections, data analysis, and statistics and probability.

### **Pre-Calculus:**

Link to video: <https://www.youtube.com/watch?v=TDsv82x9gPg>

Description: Pre-calculus is a fast-paced, honors level math class that covers mathematical reasoning, polynomial function, inequalities, exponents and logarithms and their functions, analytic geometry, trigonometric functions and identities, complex numbers, and limits.

Pre-Calculus can be taken as a College in the High School course, and students have the potential to earn 10 credits through Everett Community College.

### **AP Statistics:**

Link to video: <https://youtu.be/Y5I57SC6jXc>

AP Statistics is the equivalent of a college statistics course. In this class we cover how to analyze data, how to gather data, probability, and inference. The prerequisite for this course is Algebra 2, as the math that we use is not particularly complicated or advanced. Students can earn college credit for this course by passing the AP test in May or by taking it as a College in the High School course for 5 credits through Everett Community College.

**AP Calculus AB:**

Link to video: <https://youtu.be/czuwmmX3Flo>

AP Calculus AB is a calculus course that covers the first semester, or first 2 quarters of a college level calculus class. In this course we cover limits, derivatives, and integrals, as well as their applications. Students can earn college credit for this course by passing the AP test in May or by taking it as a College in the High School course for 5 credits through Everett Community College.

**AP Calculus BC:**

Link to video: <https://youtu.be/czuwmmX3Flo>

AP Calculus BC is a fast paced calculus course that covers the first year of a college level calculus class. In this course we cover limits, derivatives, integrals, infinite sequences and series, and calculus using different graphing systems, as well as their applications. Students can earn college credit for this course by passing the AP test in May or by taking it as a College in the High School course for 10 credits through Everett Community College.