

## *Mathematics Sequence*

	<b>Basic</b>	<b>Standard</b>	<b>Advanced/Honors</b>
<b>9<sup>th</sup> grade</b>	<b>Algebra Prep</b>	<b>Algebra 1 or Algebra EXT</b>	<b>Geometry or Geometry Honors</b>
<b>10<sup>th</sup> grade</b>	<b>Algebra 1 or Algebra 1 with Algebra Support</b>	<b>Geometry or Geometry EXT</b>	<b>Algebra 2 or Algebra 2 Honors</b>
<b>11<sup>th</sup> grade</b>	<b>Geometry</b>	<b>Algebra 2 or Algebra 2 EXT</b>	<b>Precalculus AP Statistics</b>
<b>12<sup>th</sup> grade</b>	<b>Algebra 2 or Alternative</b>	<b>Precalculus AP Statistics</b>	<b>AP Calculus AP Statistics</b>

Graduation Requirements: Students must pass Algebra 1, Geometry, and Algebra 2 in order to graduate and be considered for a 4 year college. Probability & Statistics, Personal Finance A/B and several NWCTA courses can be used as an alternative to Algebra 2 for students who are not planning to attend a 4 year university. Students taking this option will be required to sign a waiver and have parent permission.

Ninth grade math placements will be done using a combination of MSP scores along with middle school course grades and teacher recommendations.

\*See course catalog, page 5 for more information regarding Washington State testing guidelines.

## *Mathematics*

### ALGEBRA PREP MTH072 (A) / MTH073 (B)

This course is designed to prepare students for success in an Algebra 1 course the following school year. Core topics for this course include operations with rational numbers, algebraic, geometric, and graphical representations of linear models as well as proportional reason and general problem solving skills.

Duration: 2 Semesters  
Credits Per Term: .5 Elective  
Target Population: 9  
Prerequisite: 9th grade placement profile

### ALGEBRA 1 MTH082 (A) / MTH084 (B)

Algebra 1 is the standard freshman math course. Core topics include solving equations and systems of equations, linear, quadratic and exponential functions with a focus on problem solving.

Duration: 2 Semesters  
Credits Per Term: .5  
Target Population: 9  
Prerequisite: 9th grade placement profile  
or teacher recommendation

### ALGEBRA 1 LANGUAGE SUPPORT MTH100 (A) / MTH101 (B)

Algebra 1 Language Support includes all of the content of the standard 9th grade math course. Core topics include solving equations and systems of equations, linear, quadratic and exponential functions with a focus on problem solving. Students will learn this content while developing their English language acquisition through oral and written language activities.

Duration: 2 Semesters  
Credits Per Term: .5  
Target Population: 9-12  
Prerequisite: ELD Teacher/Counselor  
Signature

### ALGEBRA 1 EXTENDED TIME MTH094 (A) / MTH096 (B)

Algebra 1 Extended is designed for students who would benefit from extra instruction to master the concepts in Algebra 1. Core topics include solving equations and systems of equations, linear, quadratic and exponential functions with a focus on problem solving. Additional time may be spent reviewing prerequisite skills as needed.

Duration: 2 Semesters (meets daily)  
Credits Per Term: 1.0 (.5 Math/.5 Elective)  
Target Population: 9  
Prerequisite: 9th grade placement  
profile

### ALGEBRA 1 SUPPORT MTH078 (A) / MTH079 (B)

This course will provide opportunities for students enrolled in Algebra 1 to master prerequisite skills necessary for success in Algebra 1.

Duration: 2 Semesters  
Credits Per Term: .5 Elective  
Target Population: 10  
Prerequisite: Teacher  
recommendation and  
concurrent enrollment in  
Algebra 1

### GEOMETRY LANGUAGE SUPPORT MTH118 (A) / MTH119 (B)

Core topics in this course include: Points; Lines; Planes; Angles; Area; Volume; Triangles; Quadrilaterals; Transformations; and Trigonometry. Students will learn this content while developing their English language acquisition through oral and written language activities.

Duration: 2 Semesters  
Credits Per Term: .5  
Target Population: 10-12  
Prerequisite: Algebra 1ELD Teacher/  
Counselor Signature

## Mathematics

### GEOMETRY EXTENDED TIME MTH113 (A) / MTH115 (B)

This course is designed for students who would benefit from extra instruction to master the concepts in Geometry. Core topics include angles, proof, triangles, congruence, similarity, quadrilaterals, trigonometry, surface area and volume, and coordinate geometry. Additional time may be spent reviewing prerequisite skills as necessary.

Duration: 2 Semesters (meets daily)  
Credits Per Term: 1.0 (.5 Math/ .5 Elective)  
Target Population: 10  
Prerequisite: Successful completion of full year of Algebra 1 with Teacher Recommendation

### ALGEBRA 2 MTH218 (A) / MTH219 (B)

Algebra 2 is the standard junior math course. Core topics include equations and inequalities, polynomial functions, quadratic functions, sequences and series, probability and statistics, exponential and logarithmic functions.

Duration: 2 Semesters  
Credits Per Term: .5  
Target Population: 10-12  
Prerequisite: Successful completion of Algebra 1 and Geometry

### ALGEBRA 2 EXTENDED TIME MTH098 (A) / MTH099 (B)

This course is designed for students who would benefit from extra instruction to master the concepts in Algebra 2. Core topics include equations and inequalities, polynomial functions, quadratic functions, sequences and series, probability and statistics, exponential and logarithmic functions. Additional time may be spent reviewing prerequisite skills as needed.

Duration: 2 Semesters (every day)  
Credits Per Term: 1.0 (.5 Math/.5 Elective)  
Target Population: 11-12  
Prerequisite: Successful completion of Algebra 1 and Geometry with teacher recommendation

### GEOMETRY MTH044 (A) / MTH144 (B)

Geometry is the standard sophomore math course. Core topics include angles, proofs, triangles, congruence, similarity, quadrilaterals, trigonometry, surface area and volume, and coordinate geometry. Concepts are taught with an emphasis on Algebra 1 skills.

Duration: 2 Semesters  
Credits Per Term: .5  
Target Population: 9-10  
Prerequisite: Successful completion of Algebra 1

### HONORS GEOMETRY MTH449 (A) / MTH453 (B)

The course is taught at an accelerated pace with more rigorous problems. Core topics include angles, proof, triangles, congruence, similarity, quadrilaterals, trigonometry, surface area and volume, and coordinate geometry.

Duration: 2 Semesters  
Credits Per Term: .5  
Target Population: 9-10  
Prerequisite: Successful completion of Algebra 1 with teacher recommendation

### HONORS ALGEBRA 2 MTH220 (A) / MTH221 (B)

The course is taught at an accelerated pace with more rigorous problems. Core topics include: equations and inequalities; polynomial functions; quadratic functions; sequences and series; probability and statistics; exponential and logarithmic functions.

Duration: 2 Semesters  
Credits Per Term: .5  
Target Population: 10-11  
Prerequisite: Successful completion of Algebra 1 and Geometry with teacher recommendation

## Mathematics

### PRECALCULUS

MTH194 (A) / MTH294 (B)

In this course students will explore graphs, inverses, compositions and transformations of functions including polynomial, rational, trigonometric, exponential, and logarithmic functions. Additionally this course includes parametric equations, sequences and series, and root functions. Concurrent enrollment in Advanced Math/ Science support is recommended.

Duration: 2 Semesters

Credits Per Term: .5

Target Population: 11-12

Prerequisite: Successful completion of Algebra 1 & 2 and Geometry

### AP CALCULUS

MTH050 (A) / MTH057 (B)

This course focuses on the mastery of algebra and calculus. The course content includes: problem solving, limits, differentiation, integration, and differential equations. The course culminates with the Advanced Placement Exam. Students who earn a passing grade may be eligible for college credit.

Duration: 2 Semesters

Credits Per Term: .5

Target Population: 11-12

Prerequisite: Successful completion of Precalculus

### Probability & Statistics

MTH065 (A) / MTH066 (B)

In this course students will learn methods of calculating probabilities and probability distributions. Students will also learn about data analysis and how to use simulations to draw conclusions about populations. This course may serve as an alternative to Algebra 2 for graduation purposes and also meets prerequisite requirements for enrollment in AP Statistics.

Duration: 2 Semesters

Credits Per Term: .5

Target Population: 11-12

Prerequisite: Successful completion of Algebra 1 and Geometry with teacher recommendation.

### AP STATISTICS

MTH060 (A) / MTH061 (B)

This course covers four broad themes: Exploring Data; Sampling and Experimentation; Anticipating Patterns; and Statistical Inference. The course culminates with the Advanced Placement Exam in the spring. Students earning passing grades on the exam may be eligible for college credit. Students will be required to complete a summer assignment in preparation for the course.

Duration: 2 Semesters

Credits Per Term: .5

Target Population: 11-12

Prerequisite: Successful completion of Algebra 2 or Probability and Statistics

## Mathematics

### ADVANCED MATH/SCIENCE SUPPORT MTH005 (A) / MTH006 (B)

This course is designed to help students who are currently enrolled in Precalculus or higher math classes, and/or Chemistry or higher science classes. The class will provide students with specific assistance on understanding the content and concepts presented in advanced Math and Science course work. A strong focus will be on successful homework completion and test preparation. Time will be provided for students to seek help from one another and from the teacher. Graded Pass/Fail.

Duration: 2 Semesters (Students may sign up for 1 semester)

Credits Per Term: .5 Elective Credit

Target Population: 11-12 or teacher approval

Prerequisite: Concurrent enrollment  
Precalculus or higher math,  
and/or higher science or  
teacher permission

### MATH COLLECTION OF EVIDENCE (COE)

MTH001 (A)/MTH002 (B)

This class is an intervention for juniors and seniors who have not passed an Algebra or Geometry End of Course Exam. Students who have not taken the EOC or who have no score for the EOC (because of a missed day during testing) are not eligible to enroll in this course. Students will work to compile a collection of evidence in Algebra 1 or Geometry. Students with a proficient collection, as determined by the state scoring team, will have met standard and be eligible to receive a Certificate of Academic Achievement (assuming all other graduation requirements have been met). Students who have not passed Algebra 1 or Geometry are not eligible to take this course. *Please note: This is a Pass/Fail class dependent upon the successful completion of a COE.*

Duration: 1 Semester

Credits Per Term: .5

Target Population: 11-12 grade students who did not meet standard on the Algebra or Geometry EOC exam

Prerequisite: Teacher or Counselor recommendation.

### Personal Finance A/B

(See page 56)

### NWCTA Courses

(See Page 69-70)