



Math Placement Recommendation Form Jefferson Academy High School

Student Name _____ Current Grade _____ Current School _____

Math Teacher Name _____ Math Teacher Signature _____

Name of Current Math Class _____ Final Letter Grade Earned _____

Description of Current Math Class _____

**Please place an X next to the math class you recommend this student be placed in for the next school year. Below are the current math course descriptions at Jefferson Academy. We do not offer remedial math classes. On the other hand, students who receive a C or above in (high school level) Algebra I, Geometry or Algebra II are able to take higher level HS math classes.
Your recommendation will be kept confidential.**

Algebra 1 Yearlong

Prerequisite: Teacher Recommendation

This course covers all Algebra I topics and background topics required to succeed in Algebra I and counts as a first year of graduation requirements. This course is designed for struggling students. Extensive review is completed at the beginning of the year and the pace is slower to allow students to gain proficiency in Algebra. *Textbook: Holt McDougal Larson Algebra 1, Common Core Edition 2012.*

Algebra 1

Prerequisite: None

This course meets 9th grade Colorado standards and counts as the first year of graduation requirements. Algebra I includes the study of properties and operations of the real number system including irrational numbers, applications of proportional reasoning, and solving and graphing first degree equations, inequalities and systems of linear equations. Students generate equivalent expressions, use formulas to solve problems, simplify and factor polynomials and solve simple quadratic equations. An emphasis is placed on analyzing situations verbally, numerically, graphically, and symbolically. To meet 21st century learning, students use technology and models to investigate and explore mathematical ideas and relationships and develop multiple strategies for analyzing complex situations. *Textbook: Holt McDougal Larson Algebra 1, Common Core Edition 2012.*

Geometry

Prerequisite: C or better in Algebra 1

This course meets 10th grade Colorado standards and counts as the second year of graduation requirements. This course develops the structure of Euclidean geometry and applies the resulting theorems and formulas to address meaningful problems. It includes properties of plane and solid figures, deductive methods of reasoning and use of logic, geometry as an axiomatic system including the student of postulates, theorems and proofs, concepts of congruence, similarity, parallelism, perpendicularity, and proportion, rules of angle measurement in triangles and concepts of coordinate geometry and trigonometry. Dynamic geometry software, compass and straightedge, and other tools are used to investigate and explore mathematical ideas and relationships and to develop multiple strategies for analyzing complex situations. *Textbook: Holt McDougal Larson Geometry, Common Core Edition 2012.*

Geometry-Honors

Prerequisite: Algebra 1 and Teacher Recommendation

Honors courses have the same essential learning as corresponding non-honors high school level courses; however, honors courses cover the content with more depth and complexity, and require greater use of abstract

and higher level critical thinking skills. Instruction facilitates advanced student learning through inquiry, collaboration, information literacy, authentic applications and rigorous tasks including projects.

Algebra II

Prerequisites: C or better in Algebra 1 and Geometry

This course counts as the third year of graduation requirements. Algebra II topics include operations with rational and irrational expressions, in-depth study of linear equations and inequalities, analyzing and solving quadratic functions including complex numbers, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. Students investigate and solve linear, piecewise, absolute value, cubic radical, exponential, logarithmic, and rational functions algebraically, numerically, and graphically, with and without a graphing calculator. Students analyze data and develop mathematical models to address real world problem situations. *Holt McDougal Larson Algebra 2, Common Core Edition 2012.*

Algebra II-Honors

Prerequisites: C or better in Algebra 1 and Geometry and Teacher Recommendation

Honors courses have the same essential learning as corresponding non-honors high school level courses; however, honors courses cover the content with more depth and complexity, and require greater use of abstract and higher level critical thinking skills. Instruction facilitates advanced student learning through inquiry, collaboration, information literacy, authentic applications and rigorous tasks including projects.

Algebra III

Prerequisites: C or better in Algebra II

Topics include functions, domains, ranges, graphs, data scatter plots and curve fitting, solving equations and systems of equations, polynomial functions, rational functions, and selected other topics. Matrices, determinants, sequences, series and probability will also be covered. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized.

Pre-Calc/Trig

Prerequisites: Successful completion (A or B) of Algebra II or permission of Instructor

This course counts as the fourth year of graduation requirements. This course combines the study of trigonometry, elementary functions, analytical geometry and math analysis topics as preparation for calculus. Topics include the study of complex numbers, polynomial, logarithmic, exponential, rational, right trigonometric and circular functions and their relations, inverses, and graphs, trigonometric identities and equations, solutions of right and oblique triangles, vectors, parametric equations and their graphs, the polar coordinate system, conic sections, and limits.

Pre-Calc/Trig-Honors

Prerequisites: Successful completion (A or B) of Algebra II or permission of Instructor

Honors courses have the same essential learning as corresponding non-honors high school level courses; however, honors courses cover the content with more depth and complexity, and require greater use of abstract and higher level critical thinking skills. Instruction facilitates advanced student learning through inquiry, collaboration, information literacy, authentic applications and rigorous tasks including projects.

Inferential Probability and Statistics (STATISTICS)

Prerequisite: C or better in Algebra II

This course provides a means by which the student will become a more effective communicator through the study of probability and statistics. It focuses deeply on descriptive statistics, with an introduction to inferential statistics. Topics include sample spaces, measures of central tendency, normal curve, sampling techniques, standard deviation, t-test, correlation coefficient, techniques for determining probabilities, and matrix algebra. Students will be able to conduct a hypothesis test for a population mean, a population proportion, and a population variance; construct confidence intervals for population parameters; and conduct regression analysis for variables. Technology will be emphasized through the use of graphing calculators.

Calculus AB

Prerequisite: Successful completion (A or B) of Pre-Calc/Trig

This course follows the College Board's suggested curriculum designed to parallel college-level calculus courses. AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. This course introduces calculus and includes the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of change problems); and integral calculus (including anti-derivatives, the definite integral and application of integrals).

▪ Is this student on grade level for math? Yes No If no, what grade level is s/he on? _____

▪ Does this student receive accommodations for math? Yes No If yes, please describe _____

▪ Please let us know areas of strength that this student has displayed (e.g. turning in homework, learning new concepts, time management).

▪ Please let us know areas of weakness for this student (e.g. turning in homework, basic math skills, test-taking).

▪ Please let us know any other observations about this student that will help us place him/her in the correct math class at Jefferson Academy.

Thank you for taking the time to fill out this recommendation.

Please fax or mail to Jefferson Academy Secondary School:

**Attention: Kyrie Adams
Fax: 720-887-2435
11251 Reed Way
Broomfield, CO 80020**