

MATH ANALYSIS

Offered at both SL and HL:

- Emphasis on algebraic methods
- Develop strong skills in mathematical thinking
- Real and abstract mathematical problem solving
- For students interested in mathematics, engineering, physical sciences, and some

economics

MATH APPLICATIONS

Offered at both SL and HL:

- Emphasis on modelling and statistics
- Develop strong skills in applying mathematics to the real-world
- Real mathematical problem solving using technology
- For students interested in social sciences, natural sciences, medicine, statistics, business, engineering, some economics, psychology, and design

Applications & Interpretations Analysis & Approaches

HL

- Basic combinatorics and linear algebra topics
- A complete exploration of pre-calculus topics such as vectors.
- Expansion of probability and statistics to include topics such as the Poisson distribution
- Examination of additional calculus topics in differentiation, integration, their applications, and differential equations.

SL

- A comprehensive coverage of topics from Algebra 2 including their applications and the integration of technology
- Expansion of probability and statistics to include topics such as the Chi-square Test for independence
- A more detailed study of calculus including applications of differentiation such as optimization.

CORE

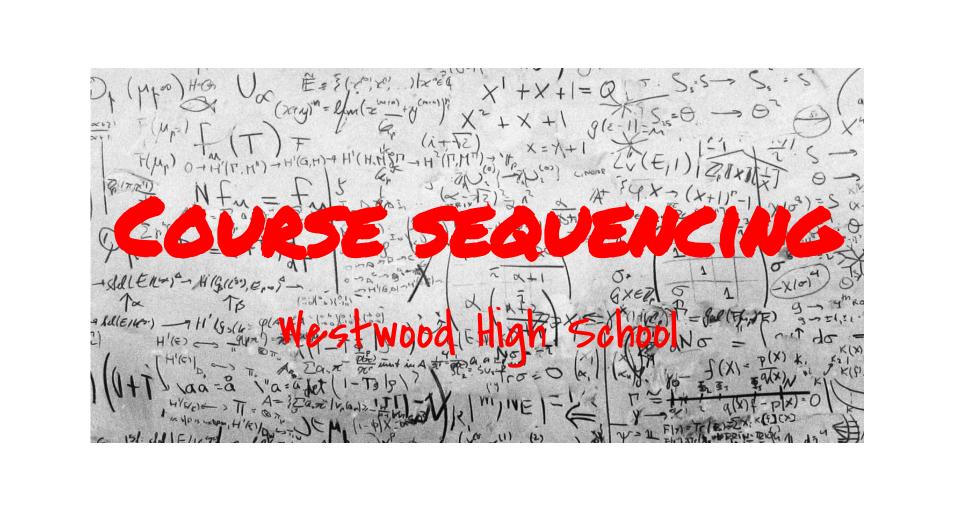
- In-depth examination of essential concepts from algebra and geometry augmented by the use of technology
- Basic concepts of probability and statistics typically found in a Pre-Calculus course
- An introduction to and focus on conceptual understanding of fundamental ideas of calculus.

SL

- A thorough study of analytic algebra and pre-calculus topics such as verifying trigonometric identities.
- Expansion of probability and statistics to include topics such as conditional probability.
- Extensive study of calculus including differentiation, integration, and their applications.

HL

- Expansion of probability and statistics including topics such as counting principles, combinations and permutations
- A more rigorous study of pre-calculus including exercises in proof by induction and lines and planes in space
- A complete study of Calculus I & II.
 Topics range from continuity and differentiability to, integration by parts and Maclaurin series.



PATHWAYS

