# The Vanguard School Junior High Eighth Grade Curriculum Outline

# **English**

#### Novels

- To Kill A Mockingbird by Harper Lee
- A Midsummer Night's Dream or Much Ado About Nothing by William Shakespeare
- Animal Farm by George Orwell
- Ivanhoe by Sir Walter Scott
- Various short stories

#### Grammar

- Parts of speech
- Parts of a sentence
- Prepositional and verbal phrases
- Independent and subordinate clauses
- Types of sentences
- Sentence diagramming
- Subject-verb and pronoun agreement
- Cases of pronouns
- Correct use of modifiers

Spelling and Vocabulary derived from literature. Weekly composition practice and instruction Speeches

## Poetry

## Latin

- Latin IB
- Latin IIB (in 2021-2022)

#### Science

# Chemical Building Blocks

- Matter
- Periodic Table

## Chemical Interactions

- Basic balancing equations
- States of matter
- Atoms, elements, and chemical bonds
- · Chemical reactions and equations

#### Motion, Forces, and Energy

- Newton's laws
- Fluid forces
- Work, power, and simple machines
- Energy and energy resources
- Thermal energy

# Waves, Electricity, and Magnetism

- · Sound and light waves
- Electricity
- Electromagnetism

## **History**

# Out of Many

- Reconstruction after the Civil War
- Immigration and political reform
- Continued Westward expansion.
- Rise of labor unions
- Industrial expansion and reform
- Latin American policies and politics
- World War I
- Roaring 20's and the Great Depression
- American isolationism
- World War II
- Rise of American international power
- Space race and social reform
- Early Cold War
- Vietnam and Watergate
- Growing equality in America/civil rights
- Late Cold War
- Events of September 11, 2001

## Math-Saxon

#### Course 3

- Ratios and proportions
- Percent increase, tax, tips, and discounts
- Area and perimeter of all basic shapes
- Area and circumference of circles
- Scientific notation
- Simplify expressions, solve equations
- Graph a line in slope intercept form

#### Algebra I

- Graph functions
- Simplify complex expressions
- Solve complex equations
- Factor trinomials
- Real world word problems
- Statistics and probability

## Algebra II

- Linear functions
- Matrices
- Polynomials
- Exponential and logarithmic functions
- Trigonometry
- Quadratic functions