

# McKinley's CLA Ninth Grade Curriculum



McKinley's curriculum framework builds on the strong foundation of gifted education in the SLPS elementary gifted programs and emphasizes a conceptually challenging, in-depth, and complex content within cognitive, affective, aesthetic, social, and leadership domains as recommended by National Association of Gifted Children (NAGC) *2010 Pre-K-Grade 12 Gifted Programming Standards*. Differentiation, content-based acceleration, and enrichment are interventions implemented for our high-ability learners. In addition to providing project/problem based learning experiences, McKinley uses concepts from *Capturing Kid's Hearts* and the Six Pillars of Character to build community amongst students, staff, and families.

## **9<sup>th</sup> Grade Curriculum at a Glance**

### **Communication Arts**

#### **Readings:**

*The Tell Tale Heart* by Edgar Allen Poe

*I Felt a Funeral in my Brain* by Emily Dickinson

*Oedipus the King* by Socrates

"*True Crime: The roots of an American obsession,*" by Walter Mosley

*New York Times Book Review "How Bernard Madoff Did It,"* by Liaquat Ahamed

*The Wizard of Lies Epilogue Excerpt,* by Diana Henriques

**Textbook:** Engage ELA <https://www.engageny.org/resource/grade-9-english-language-arts>

#### **Literacy Skills & Habits**

- Read closely for textual details
- Annotate texts to support comprehension and analysis
- Engage in productive evidence-based discussions about text
- Collect and organize evidence from texts to support analysis in writing
- Make claims about and across texts using specific textual evidence
- Engage in productive evidence-based conversations around central ideas or themes
- Determine meaning of unknown vocabulary
- Provide an objective summary of the text
- Paraphrase and quote relevant evidence from a text
- Write original evidence-based claims and defend using evidence
- Critique one's own writing and peers' writing
- Revise writing
- Generate and respond to questions in scholarly discourse

## **Communication Arts Enrichment Activities**

- In depth literary analysis and writing opportunities

**Mathematics (Note: Many students are accelerated based on a track record of math ability and placement tests. Refer to the appropriate grade level for your child's placement.)**

### Algebra Curriculum at a Glance (Algebra 150)

This for-credit high school course is a study of the language, concepts, and techniques of Algebra that will help students acquire an understanding of numbers and increased proficiency in mathematical operations and algebraic notations, and will encourage original critical thinking and problem solving. Skills taught in the course lay groundwork for upper level math and science courses and have practical uses.

Following is a break-down of content covered per learning strand:

#### **Number and Quantity**

- The Real Number System
- Quantities

#### **Algebra**

- Seeing Structure in Expressions
- Arithmetic with Polynomials and Rational Expressions
- Creating Equations
- Reasoning with Equations and Inequalities

#### **Functions**

- Interpreting Functions
- Building Functions
- Linear, Quadratic, and Exponential Models

#### **Statistics and Probability**

The curriculum is designed to cover the objectives tested by the State of Missouri's EOC (End of Course) Test for High School Algebra. Middle School Students taking the Algebra EOC will not take the regular grade level Math MAP assessment. Graphing Calculators will be used to integrate technology and apply mathematical concepts and it is recommended that students come to class with a calculator.

### Geometry Curriculum at a Glance (Geometry 250)

This for-credit, high school course will help students acquire an understanding of geometric and spatial relationships. Students will study real numbers, operations, and patterns. They will investigate angles, parallel and perpendicular lines, circles, two- and three-dimensional objects, surface area, volume, Cartesian coordinates, sample space, probability distribution, constructions, transformations, and symmetries. The course will also introduce students to inductive and deductive reasoning, which they will use to establish the validity of conjectures, prove theorems, and critique the arguments of others.

The curriculum is designed to cover the objectives tested by the State of Missouri's EOC (End of Course) Test for High School Geometry. Middle School Students taking the Geometry EOC will not take the regular grade level Math MAP assessment. Graphing Calculators will be used to integrate technology and apply mathematical concepts.

### Advanced Algebra Curriculum at a Glance (Advanced Algebra 350)

In this course, students will be expected to meet the state high school graduation requirements. Students will understand and solve problems related to the following topics: Properties of Functions, Linear, Polynomial, Exponential, Logarithmic, Rational, and Radical Functions, Matrices, Probability and Statistics, Sequences and Series, and Trigonometry.

**Textbook: Holt McDougal Algebra 2**

- Unit 1: Foundation for Functions, Linear Functions, and Linear Systems
- Unit 2: Matrices, Quadratics Functions, and Polynomial Functions
- Unit 3: Exponential and Logarithmic Functions, Rational and Radical Functions, and Properties and Attributes of Functions
- Unit 4: Conic Sections, Probability and Statistics, and Sequences and Series
- Unit 5: Trigonometric Functions and Trigonometric Graphs and Identities

**Math Enrichment Activities**

- Math Enrichment Activities include group work and correct presentations of in-class work as well as an end-of-semester project where students choose a topic and present for 5 minutes on an application of math to the real world.

**Science**

**Freshman Physics**

Students will be expected to meet the state high school graduation requirements. Students will understand and solve problems related to the following topics: motion, force, laws of conservation, energy, waves and vibrations, sound, light, and electricity.

**Main Topics Covered:**

- Unit 1: Forces, Motion, Conservation Law
- Unit 2: Work, Energy, Systems, Equilibrium
- Unit 3: Energy Flow and Transfer, Energy Systems, Changes in Matter
- Unit 4: Electricity
- Unit 5: Vibrations, Waves, Sound
- Unit 6: Light, Optics
- Unit 7: Heat, Fluids, Hydraulics, Magnetism, Motors

**Educational Resources:** CPO Science: [www.curiosityplace.schoolspecialty.org](http://www.curiosityplace.schoolspecialty.org); textbook and simulations are available

**Science Enrichment Activities:** Lab days for investigating covered concepts; optional participation in Science Fair

**Social Studies**

- Progression of Learning
  - *American Beginnings to 1877*
  - *Bridge to the 20<sup>th</sup> Century (1877-1917)*
  - *Modern America Emerges (1890-1920)*
  - *The 1920's and the Great Depression (1919-1940)*
  - *World War II and Its Aftermath (1931-1960)*

- *Living With Great Turmoil (1954-1975)*
- *Passage to a New Century (1968-Present)*

**Educational Resources:** Textbook: *The Americans* (Holt-McDougal—2012), *The Story of America* (Holt Rinehart & Winston—January 1994), *African American History* (Holt-McDougal—2008) Geography enrichment website: [www.Sheppardsoftware.com](http://www.Sheppardsoftware.com)

**Social Studies Enrichment Activities:** Kids Vote, Debating the Debates, Classroom UN

**Additional Enrichment Activities for Ninth Graders:**

- Chess Club, Junior Achievement, Debate, Science Olympiad, Sports, Black History Month Performance, School Musical, etc.

We hope you are able to get an understanding of our values and academics at McKinley CLA. Should you have additional questions later, please visit our website (<http://www.slps.org/mckinleycla>) where you can find answers too many frequently asked questions

***Ninth Grade Core Instructors:***

***Kathryn Beckmann, English Language Arts***

***Ellis Smith, Social Studies***

***Erin Cato, Mathematics***

***Matthew Rosado, Science***