

McKinley Classical Leadership Academy: Tenth Grade Curriculum



McKinley’s curriculum framework emphasizes 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 Kids’ Hearts* and the Six Pillars of Character to build community amongst students, staff, and families.

10th Grade Curriculum at a Glance

Communication Arts

Readings:

Fiction:

- *Macbeth* by Shakespeare
- *A Raisin in the Sun* by Lorraine Hansbury
- *Of Mice and Men* by John Steinbeck
- Additional literary works as needed

Nonfiction/Informational:

- *Night* by Elie Wiesel
- “Letter From Birmingham Jail” by Martin Luther King, Jr.
- Additional literary works as needed, including but not limited to works from Julia Alvarez, Ahmad Shamlu, Alice Walker, Rabindranath Tagore, Mark Memmott, Malala Yousafzai, and Eleanor Roosevelt

Textbook: Glencoe

Additional Curriculum Resource: Engage NY program

Course content addresses the Missouri Learning Standards for 10th grade English Language Arts, which are listed below.

Reading

Reading Literary Text

Comprehend and Interpret Texts (Approaching Texts as a Reader): Evidence/Inference

9-10.RL.1.A Draw conclusions, infer and analyze by citing relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Comprehend and Interpret Texts (Approaching Texts as a Reader): Word Meanings

9-10.RL.1.B Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings using context, affixes or reference materials.

Comprehend and Interpret Texts (Approaching Texts as a Reader): Text Features

9-10.RL.1.C Interpret visual elements of a text and draw conclusions from them (when applicable).

Comprehend and Interpret Texts (Approaching Texts as a Reader): Summarize/Theme

9-10.RL.1.D Using appropriate text, determine two or more themes in a text, analyze their development throughout the text and relate the themes to life experiences; provide an objective and concise summary of the text.

Analyze Craft and Structure (Approaching Texts as a Writer): Structure

9-10.RL.2.A Analyze how an author's choices concerning how to structure a text, order events or manipulate time impact the reader.

Analyze Craft and Structure (Approaching Texts as a Writer): Point of View

9-10.RL.2.B Analyze how point of view is reflected in the characters, setting and plot.

Analyze Craft and Structure (Approaching Texts as a Writer): Craft and Meaning

9-10.RL.2.C Analyze the cumulative impact of specific word choices and syntax on meaning and tone.

Analyze Craft and Structure (Approaching Texts as a Writer): Interaction and Meaning

9-10.RL.2.D Analyze how complex characters develop over the course of a text to advance the plot and develop the theme.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Text in Forms

9-10.RL.3.A Analyze multiple performances of a story, drama or poem, evaluating how each version interprets the source text.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Relationships in Texts

9-10.RL.3.B Explain how and why an author alludes to or transforms source material within his or her text.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Historical Context

9-10.RL.3.C Analyze how multiple texts reflect historical and/or cultural contexts.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Comprehension

9-10.RL.3.D Read and comprehend literature, including stories, dramas and poems, independently and proficiently.

Reading Informational Text

Comprehend and Interpret Texts (Approaching Texts as a Reader): Evidence/Inference

9-10.RI.1.A Draw conclusions, infer and analyze by citing relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Comprehend and Interpret Texts (Approaching Texts as a Reader): Word Meanings

9-10.RI.1.B Determine the meaning of words and phrases as they are used in the text, including figurative, connotative and content-specific meanings using context, affixes or reference materials.

Comprehend and Interpret Texts (Approaching Texts as a Reader): Text Features

9-10.RI.1.C Interpret visual elements of a text including those from different media and draw conclusions from them (when applicable).

Comprehend and Interpret Texts (Approaching Texts as a Reader): Summarize/Claim

9-10.RI.1.D Explain two or more central/main ideas in a text, analyze their development throughout the text and explain the significance of the central ideas; provide an objective and concise summary of the text.

Analyze Craft and Structure (Approaching Texts as a Writer): Structure

9-10.RI.2.A Analyze how an author's choices concerning how to structure a text or sequence information impact the reader.

Analyze Craft and Structure (Approaching Texts as a Writer): Point of View

9-10.RI.2.B Analyze how an author uses rhetoric to advance point of view or purpose.

Analyze Craft and Structure (Approaching Texts as a Writer): Craft and Meaning

9-10.RI.2.C Analyze the cumulative impact of specific word choices and syntax on meaning and tone.

Analyze Craft and Structure (Approaching Texts as a Writer): Argument/Evidence

9-10.RI.2.D Evaluate an author's argument, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Texts/Forms

9-10.RI.3.A Analyze how similar ideas or topics are portrayed in different media formats.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Relationships/Texts

9-10.RI.3.B Evaluate how effectively two or more texts develop similar ideas/topics.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Historical Context

9-10.RI.3.C Analyze how multiple texts reflect the historical and/or cultural contexts.

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Comprehension

9-10.RI.3.D Read and comprehend informational text independently and proficiently.

Writing

Approaching the Task as a Researcher: Research

9-10.W.1.A

a. Conduct research to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; gather multiple relevant, credible sources, print and digital; integrate information using a standard citation system.

b. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

Approaching the Task as a Writer: Development

9-10.W.2.A Follow a writing process to produce clear and coherent writing in which the development, organization, style and voice are appropriate to the task, purpose and audience; self-select and blend (when appropriate) previously learned narrative, expository and argumentative writing techniques.

Approaching the Task as a Reader: Revise and Edit

9-10.W.3.A Review, revise and edit writing with consideration for the task, purpose and audience.

a. Organization and content: Introduce the topic, maintain a clear focus throughout the text, and provide a conclusion that follows from the text. Achieve the writer's purpose and demonstrate an awareness of audience by making choices regarding organization and content.

b. Word choice, syntax and style: Choose precise language and make syntactical choices to reflect an understanding of how language contributes to meaning.

c. Conventions of standard English and usage: Demonstrate a command of the conventions of standard English grammar and usage, including spelling and punctuation.

d. Use a variety of appropriate transitions to clarify relationships, connect ideas and claims, and signal time shifts.

e. Use technology, including the internet, to produce, publish and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

Speaking and Listening

Collaborating: Conversation

9-10.SL.1.A Work with peers to set rules for collegial discussions and decision making, clear goals, deadlines and individual roles as needed.

Collaborating: Questioning

9-10.SL.1.B Delineate a speaker's argument and claims, evaluating the speaker's point of view, reasoning and evidence in order to propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify or challenge ideas and conclusions.

Collaborating: Viewpoints of Others

9-10.SL.1.C Respond thoughtfully to diverse perspectives including those presented in diverse media, summarize points of agreement and disagreement, resolve contradictions when possible and determine what additional information or research is needed.

Presenting: Verbal Delivery

9-10.SL.2.A Speak audibly and to the point, using conventions of language as appropriate to task, purpose and audience when presenting including appropriate volume, clear articulation and accurate pronunciation at an understandable pace, avoiding verbal filler that might be distracting to listeners.

Presenting: Nonverbal

9-10.SL.2.B Make consistent eye contact with a range of listeners when speaking, using effective gestures to communicate a clear viewpoint and engage listeners; avoid body language or mannerisms that might be distracting to the audience.

Presenting: Multimedia

9-10.SL.2.C Plan and deliver appropriate presentations concisely and logically based on the task, audience and purpose, making strategic use of multimedia in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

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.)

Geometry 250:

Geometry 250 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.

By the end of the year, students will be able to....

- Experiment with transformations in the plane.
- Understand congruence in terms of rigid motions.
- Prove geometric theorems.
- Make geometric constructions.
- Understand similarity in terms of similarity transformations.
- Prove theorems involving similarity.
- Define trigonometric ratios, and solve problems involving right triangles.
- Understand and apply theorems about circles.
- Find arc lengths and areas of sectors of circles.
- Translate between the geometric description and the equation for a conic section.
- Use coordinates to prove geometric theorems algebraically.
- Explain volume formulas and use them to solve problems.
- Visualize relationships between two-dimensional and three-dimensional objects.
- Apply geometric concepts in modeling situations.
- Understand independence and conditional probability and use them to interpret data.

Chapters:

- Foundations of Geometry
- Parallel and Perpendicular Lines
- Transformations
- Triangle Congruence
- Relationships in Triangles
- Quadrilaterals
- Similarity
- Right Triangles and Trigonometry
- Coordinate Geometry
- Circles
- Two and Three Dimensional Models
- Probability

Advanced Algebra 350 (Algebra 2):

Algebra 350 (Algebra II) will help students acquire an understanding of real world applications of mathematical procedures as they prepare for higher- level mathematic courses. Students will study real numbers, operations, and patterns as they extend their understanding of algebraic concepts. They will work with matrices, complex numbers, logarithms, polynomial functions and their inverse, systems of equations and inequalities, transformations, mathematical models, scatter-plots, and statistics.

By the end of the year, students will be able to....

- Extend and use the relationship between rational exponents and radicals
- Use complex numbers.
- Define and use logarithms.
- Solve equations and inequalities.
- Solve general systems of equations and inequalities.
- Perform operations on polynomials and rational expressions.
- Use and interpret functions.
- Create new functions from existing functions.
- Use functions to model real-world problems
- Make inferences and justify conclusions.

Chapters:

- Linear Functions and Systems
- Quadratic Functions and Equations
- Polynomial Functions
- Rational Functions
- Rational Exponents and Radical Functions
- Exponential and Logarithmic Functions
- Trigonometric Functions
- Trigonometric Equations and Identities
- Conic Sections
- Matrices
- Data Analysis
- Probability

Science

Textbook: *Biology*, Steven Nowicki, 2008

Main Topics Covered—

- Quarter 1 - Ecology
- Quarter 2 - Cells
- Quarter 3 – Genetics
- Quarter 4 - Evolution

Next Generation Science Standards Tie-Ins

- Nature of Science—The process of doing science.
- Cases from history
- Darwin Theory of Biological Evolution and the Modern Synthesis
- James Watson and Francis Crick and the Molecular Model of Genetics
- Inheritance and Variation of Traits “How are the characteristics from one generation related to the previous generation?”
- Matter and Energy in Organisms and Ecosystems “How do organisms obtain and use energy they need to live and grow? How do matter and energy move through ecosystems?”
- Interdependent Relationships in Ecosystems - “How do organisms interact with the living and non-living environment to obtain matter and energy?”
- Natural Selection and Evolution - “How can there be so many similarities among organisms yet so many different plants, animals, and microorganisms? How does biodiversity affect humans?”

Science Enrichment Activities: Fetal pig dissection in the spring

Social Studies

- Progression of Topics:
 - *First Civilizations and Empires*
 - *New Patterns of Civilization*
 - *The Early Modern World*
 - *An Era of European Imperialism*
 - *The Twentieth-Century Crisis*
 - *Toward a Global Civilization*

Educational Resources:

Textbook: *National Geographic World History* (2005), Online textbook / resources:

www.worldhistoryforusall.org, Geography enrichment website: www.sheppardsoftware.com

Social Studies Enrichment Activities: Kids Vote, The History of our Stuff Project, World Atlas Project

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 to many frequently asked questions.

Tenth Grade Class Advisors