

Typical Course of Study: Grade 11

LANGUAGE ARTS

Reading Literature and Informational Text and Literacy in History/Social Studies, Science, and Technical Subjects

- Cite evidence from text to support analysis of both explicit and implicit messages within the text
- Cite evidence from text to support analysis of primary and secondary sources
- Identify the theme or central idea of a text and analyze its development
- Identify in detail a series of events described and the relationships among them
- Summarize literary and informational or explanatory texts
- Follow a multistep procedure when performing science or technical tasks
- Compare and contrast treatments of the same topic in several sources
- Analyze how the author's choices effect the development of a story
- Analyze how a text makes connections among individuals, events, or ideas
- Analyze how a complex primary source is structured
- Determine meanings and effects of words, phrases, or symbols as used in a text
- Evaluate the effectiveness of the structure of a work in furthering the key ideas or argument
- Analyze how the structure of parts of a text contribute to the overall meaning
- Analyze a work that uses satire, sarcasm, irony, or understatement
- Determine author's purpose or point of view and how rhetoric is used to advance that purpose or point of view
- Analyze multiple interpretations of a story, drama, or poem
- Compare the point of view or claims of two or more authors on similar topics
- Show knowledge of 18th-, 19th-, and 20th-century foundational works of American (or home country) literature
- Integrate and evaluate multiple sources of information in different formats
- Integrate information from diverse primary and secondary sources
- Analyze whether an author supports a claim with sound reasoning and sufficient evidence
- Analyze and evaluate 17th-, 18th-, and 19th-century foundational U.S. literary and historical documents (or similar documents from appropriate periods for home country)
- Evaluate the hypotheses, data, analysis, and conclusions of a science or technical text
- By the end of the academic year, read and understand grade-level literary and informational texts (including history/social studies, science, and technical subjects) independently and with proficiency

Speaking and Listening

- Participate in collaborative discussions on a variety of grade-level topics
- Express ideas clearly and respectfully in group discussions
- Follow agreed-upon rules and preparation procedures for discussions

- Ask questions and respond to others, building on others' ideas
- Integrate into speech preparation diverse sources of information in a variety of formats
- Evaluate a speaker's point of view, reasoning, and use of rhetoric and evidence
- Identify an argument, claims; evaluate the soundness of reasoning and evidence
- Present claims or information in logical sequence supported with relevant facts and details
- Use clear pronunciation and appropriate eye contact and volume when speaking
- Add digital media and visual components to clarify ideas in presentations
- Adapt speech to a variety of tasks, showing command of formal English

Writing

- Write arguments supported with clear reasons and relevant evidence, including arguments in history, social studies, science, and technical topics
- Write informative or explanatory pieces developed with relevant details, including arguments in history, social studies, science, and technical topics
- Write narrations that include details, put events in order, and provide a conclusion
- Produce writing appropriate to the task, purpose, and audience
- Strengthen writing by getting feedback, revising, editing, and rewriting
- Add dialogue and descriptions to develop characters and events
- Use technology, including the Internet, to produce and publish writing
- Contribute to collaborative group writing projects
- Conduct short and sustained research projects on a topic through investigation
- Draw and cite evidence from a variety of texts to support analysis
- Assess the credibility and accuracy of sources
- Quote or paraphrase data and conclusions while avoiding plagiarism
- Include evidence from literary or informational texts to support analysis
- Regularly produce clear writing for a variety of tasks, purposes, and audiences (including writing in history/social studies, science, and technical subjects)

English Language Skills

- Show a command of conventions of standard English grammar and usage when writing or speaking
- Correctly use conventions of English when writing (capitalization, punctuation, and spelling)
- Make effective choices of language for meaning and style when writing or speaking
- Know the difference between formal and informal English and when to use each

Vocabulary

- Use context clues to determine word and phrase meanings
- Use word structure clues to determine meanings of unknown words
- Use relationships between words to better understand each word's meaning
- Use references (print and digital) to determine or verify a word's meanings, or to find its pronunciation or part of speech
- Interpret, analyze, and use figurative language in context
- Distinguish shades of meaning among related words
- Analyze nuances in the meaning of words with similar denotations
- Distinguish among connotations of words with similar denotations
- Learn and use grade-level general academic vocabulary

MATHEMATICS

Algebra II

- The complex number system
- Operations with complex numbers
- Exponents, including rational exponents
- Expressions in radical and exponent form
- Rewriting rational expressions in equivalent forms
- Arithmetic operations on polynomials
- Polynomial identities and equations
- Structure of expressions
- Expressions in equivalent forms to solve problems
- Equations and inequalities in one variable
- Reasoning and problem solving with equations and inequalities
- Graphic representations of equations and inequalities
- Quadratic equations
- Number and type of solutions of a quadratic equation
- Systems of equations
- Graphic representations of systems of equations
- Concept of a function
- Function notation
- Inverse functions
- Interpreting and describing functions from models
- Building functions to show a relationship between two quantities
- Writing functions in different forms
- Comparing properties of two functions
- Rate of change of a function
- Inverse functions
- Linear functions
- Quadratic functions
- Exponential functions
- Trigonometric functions
- Logarithmic functions
- Graphing functions
- Building new functions from existing functions
- Parameters of functions from a graph
- Modeling periodic phenomena with trigonometric functions
- Proving the trigonometric identities
- Translating between the geometric description and the equation for a conic section
- Modeling a bivariate data set with a function

SCIENCE

Chemistry

- Structure and properties of matter
- Physical and chemical properties of substances
- Atomic structure and formation
- Historical development of atomic theory

- Electrical forces within and between atoms
- Molecular structure
- Molecular behavior
- Periodic Table
- Properties of elements
- Physical properties of substances
- Physical changes
- Mixtures
- Solutions, solubility, and precipitation
- Acids, bases, and electrolytes
- Chemical properties of elements
- Chemical reactions and energy
- Changes during chemical reactions
- Describing and predicting chemical reactions
- Acid-base reactions
- Oxidation-reduction reactions
- Chemical kinetics
- Moles and stoichiometry
- Chemical equilibrium
- Chemical bonding
- Chemical formulas and equations
- Nuclear processes
- Nuclear energy and radioactivity
- Radioactive decay
- Carbon chemistry
- Organic compounds and reactions
- Safe practices during investigations

HEALTH AND SAFETY

- Gaining, analyzing, and applying health information
- Knowledge about and use of available health services
- Health choices and long-term consequences of choices
- Benefits of, practices for, and personal responsibility for health
- Personal health profile and plan
- Interrelationships of physical, mental, and social health
- Impacts of social pressures on physical, emotional, and social health
- Marketing and advertising effects on health behavior
- Structure, functions, and interdependence of major body systems
- Causes and effects of poor body image
- Eating disorders and their prevention and treatment
- Changes in anatomy during puberty
- Role of hormones in growth, development, and personal health
- Reproductive processes; healthy development of fetus
- Consequences of sexual activity
- Strategies to resist pressures to become sexually active
- Characteristics of healthy relationships and dating behaviors
- Lifelong strategies for identifying and preventing depression and anxiety
- Avoidance of risky or self-destructive behaviors
- Health risks and effects of technology use

- Myths and facts related to disease transmission and prevention
- Laws relating to tobacco, alcohol, drugs, and other controlled substances
- Treatment options for drug and other addictions
- Understanding of first-aid procedures and emergency response
- Use, abuse, and effects of medications, tobacco, alcohol, and other controlled substances
- Relationship between tobacco, alcohol, or illegal drugs and such unsafe situations as date rape, sexually-transmitted disease, and drinking and driving
- Prevention of and response to deliberate and accidental injuries
- Reasons and ways to avoid violence, gangs, weapons, and drugs
- Skills to identify, avoid, report, and cope with potentially dangerous situations
- Positive and negative characteristics of social groups, gangs, clubs, cliques
- Development of self-confidence, self-esteem, and self-control
- Understand appropriate ways to express emotions
- Skills for building and maintaining healthy relationships
- Bullying, alternative behaviors to bullying, and appropriate responses to bullying
- Strategies for resolving conflicts with peers and others

SOCIAL SCIENCE

United States History

- Civilizations of indigenous nations in North America
- Explorations of the Americas
- European colonization of America
- Effects of colonization on indigenous people
- Mayflower Compact
- Independence movement
- American Revolution
- Founding documents
- Principles and values of the new democratic government
- Challenges of the new government
- Drafting and ratification of the Constitution
- Federalists and anti-federalists
- Economic expansion; agricultural and industrial growth (1792-1861)
- Conquest of indigenous people and Mexican territory
- Regional and ethnic divisions and reform movements
- Jeffersonian Era
- Louisiana Purchase
- Slavery and abolition
- Conflicts between the North and South
- Civil War and Reconstruction
- African-American struggle for rights
- Voting rights
- Industrialization (1870-1920)
- Growth as an industrial and global power
- Immigration
- Class and ethnic conflicts
- The Progressive Era
- Urbanization

- World War I: causes, events, and effects
- The Great Depression
- The New Deal
- World War II: causes, events, U.S. role, impacts
- Post World War II and the Cold War
- Vietnam War and protests
- Civil Rights movements
- Changes in policies about Native Americans
- Era of geopolitical dynamics and a global economy
- Impact of technological innovations on society
- U.S. identity, roles, and values in the world (1980-present)
- National security
- Current domestic and foreign policy
- Global interdependence and cooperation
- Current national and global issues (human rights, terrorism, environment, poverty, hunger, refugees, resource scarcity, genocide, etc.)

ARTS

Note about high school arts curriculum: High school curriculum generally requires some sort of study and credit in the arts. Most schools offer experiences and study in a variety of areas in the arts. Some examples are:

- Animation
- Architecture
- Casting
- Ceramics
- Choral music
- Computer graphics and applications
- Construction
- Dance or other creative movement
- Digital arts
- Drama (including mime, storytelling, and technical aspects of theater)
- Drawing
- Film
- Graphic design
- Improvisational music
- Instrumental music
- Jewelry-making
- Metal Sculpture
- Mosaics
- Painting
- Photography
- Printmaking
- Sculpture
- Textiles and fiber art

In the study and practice of any of the performance or visual arts, students encounter such topics and sharpen such skills as:

- Watching, listening, and responding to works of art
- Background and elements of particular art form
- Understanding of the processes and techniques of particular forms
- Principles of design
- Vocabulary of particular art forms
- Interpretation, analysis, and evaluation of works of art
- Reflecting on own experiences and creations or performances
- Art history
- Well-known artists and works of visual or performing art forms
- Cultural contexts and expressions of art
- Style, materials, and techniques used in a work of art
- Generating questions about a work of art
- Considering messages and purposes of a particular work of art
- Responding orally, in writing, or some other way to works of art
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- Reflecting on the contributions of artists to society
- Careers in art
- Discipline and mindset for improving and developing skills in art
- Fostering of creativity and self-expression
- Development of artistic awareness, imagination, perception, skill
- Experimenting with a variety of media, forms, and techniques
- Solving design problems
- Use of digital media and tools for producing, viewing, or responding to art
- Polishing and furthering personal skills in a chosen area of art
- Participation in collaborative discussions about works of art
- Participation in collaborative creation of works of art
- Proper safety procedures for activities in the specific arts

TECHNOLOGY

General goal for high school students: Use technology **within all content areas** to collaborate, communicate, generate innovative ideas, create original works, and investigate and solve problems.

- Demonstrating proficient keyboarding skills
- Understanding of operating system tools, applications, and storage devices
- Use of a variety of common applications and productivity tools
- Creating products combining text, images, sound, music, and video
- Creating and publishing stories, games, animations, problems, and solutions
- Creating Web pages
- Use of spreadsheet and concept-mapping software
- Use of interactive tools to design polls or surveys to gather data
- Making contributions to blogs, wikis, and other digital collaborative forums
- Use of online databases or simulation software to interpret and predict trends
- Increasing knowledge about many cultures through digital content
- Communicating with multiple audiences through a variety of formats and media
- Increasing understanding of a local or global issue
- Researching and using information fluently
- Choosing appropriate search engines, directories, and online applications

- Selecting appropriate, relevant sources for a purpose or audience
- Analysis and synthesis of information to make decisions or develop solutions
- Assessing the credibility and validity of online sources
- Use of bibliography tools to cite sources from digital sources
- Reporting and sharing results or solutions
- Exploring ways to receive feedback from multiple, appropriate audiences
- Demonstrate understanding and avoidance of potential online dangers
- Understanding health hazards of frequent technology use
- Demonstrating safe and legal use of online sites and information
- Use of passwords, virus prevention, and other protective procedures
- Understanding risks of social networking sites; safe sharing of personal information online
- Understanding privacy issues and how data are kept and available publicly
- Practicing ethical and respectful behavior online
- Careful, responsible use and maintenance of digital equipment
- Demonstrating openness to learning new technologies and procedures