

2026-2027 McLouth High School Course Description Handbook

McLouth High School Graduation Requirements (through the class of 2027):

- 4 credits – English Language Arts
- 3 credits – History/Government/Social Studies
- 3 credits – Mathematics
- 3 credits – Science
- 1 credit – PE/Health
- 1 credit – Fine Arts (Band, Choir, Art, Theatre, Forensics)
- 1 credit – Career & Technical Education
- ½ credit – Public Speaking
- ½ credit – Personal Finance
- 7 credits – Electives (courses not used to meet the requirements above)

McLouth High School Graduation Requirements (class of 2028 and beyond):

- 3.5 credits – English Language Arts
- 3 credits – History/Government/Social Studies
- 3 credits – Mathematics
- 3 credits – Science
- 1 credit – STEM (advanced Math, Science, Computer Science, or CTE)
- 1 credit – PE/Health
- 1 credit – Fine Arts (Band, Choir, Art, Theatre, Forensics)
- 1 credit – Career & Technical Education (Agriculture or Business)
- .5 credit – Public Speaking
- .5 credit – Personal Finance
- 6.5 credits – Electives (courses not used to meet the requirements above)

1 credit = 1 full year of a course; .5 credit = 1 semester of a course

Required courses are marked with **R**

English Language Arts

Freshman English R

This course develops essential literacy skills through analysis of diverse literature—novels, drama, poetry, and nonfiction—and comprehensive writing instruction. The curriculum focuses on strengthening critical reading, analytical writing (narrative, persuasive, expository), grammar, vocabulary, and oral communication skills to prepare students for the future.

Sophomore English R

This rigorous course strengthens critical thinking, reading, and writing skills, focusing on world literature, thematic analysis, oral communication, and complex writing tasks. The course enhances competency in argumentative and analytical writing, grammar usage, and vocabulary while preparing students for college-level reading and, often, standardized tests such as the ACT.

Junior English R

Students will continue developing their listening, reading, writing, and speaking skills to explore literature from ancient history through to the modern day.

Senior English

Students will conclude their secondary study of the English language with further development of their listening, reading, writing, and speaking skills and a focus on job and career readiness.

College English

(1st semester) This course provides instruction and practice in the principles of written composition. The major emphasis is on improving the ability to organize and express thoughts clearly and effectively. Students will be expected to write coherent essays that declare and support a thesis, as well as use and document research material.

**College Credit Available through HCC as ENG 101: Composition I.

(2nd semester) This is the second of a two-course sequence in college English composition. The course will continue to emphasize improving the ability to organize and express thoughts in clear, effective writing. The course will use literature study as a basis for improving and extending research, critical analysis, and writing skills. The forms, elements, and techniques of literature will be examined in terms of how literature affects readers.

**College Credit Available through HCC as ENG 102: Composition II.

Social Studies

World History **R**

Students will trace how major events from around the 14th through the 20th century connect to one another across regions and time. The course emphasizes cause and effect—how ideas, conflicts, inventions, leaders, and movements sparked change and reshaped societies. Students will build a big-picture understanding of global turning points such as exploration and colonization, revolutions, industrialization, imperialism, and the world wars, while comparing perspectives from different cultures and evaluating historical evidence.

American History **R**

This history course will trace the development of our country from Reconstruction to the present era. It examines aspects of history through many differing viewpoints. Topics include industrialization, urbanization, imperialism, WWI, Great Depression, WWII, Cold War, Civil Rights Movement, and Vietnam War.

Government **R**

This course will examine the system of government in the U.S., its purpose, processes, and history. This class will introduce major aspects of American government, including the Constitution, branches, departments, elections, law-making processes, political parties, interest groups, civil liberties, etc.

Psychology

This psychology course will cover some of the major psychological and sociological concepts. Topics include learning, memory, senses, altered states of consciousness, abnormal psychology, conformity, culture, and criminology.

Mathematics

Pre-Algebra

Students will strengthen core math skills while beginning the shift from arithmetic to algebraic thinking in preparation for Algebra I. The course focuses on fluency with integers, fractions, decimals, and percents, along with ratios, rates, and proportional reasoning. Students will learn to write and simplify expressions, solve one- and two-step equations and inequalities, and apply math to real-world problems using tables, graphs, and basic functions. Emphasis is placed on accuracy, problem-solving strategies, and explaining mathematical reasoning.

Algebra I **R**

Students will develop a strong foundation in algebra by learning key concepts and applying them to real-world situations. The course includes working with expressions and equations, solving linear equations and inequalities, graphing and interpreting functions, and using systems of equations to model problems. Students will also explore exponents, polynomials, and introductory quadratic relationships, building skills in reasoning, accuracy, and mathematical communication. Emphasis is placed on problem-solving, connecting algebra to everyday contexts, and preparing for higher-level math.

Geometry **R** (prerequisite: Algebra I)

Students will study the fundamentals of geometry by exploring points, lines, planes, and the relationships between angles and shapes. The course emphasizes reasoning and proof, helping students learn how to justify solutions using geometric definitions, postulates, and theorems. Students will work extensively with triangles—congruence, similarity, right-triangle

relationships, and special properties—while also examining polygons, circles, perimeter, area, and volume. Throughout the course, students will apply geometric thinking to diagrams and real-world problems, strengthening precision, logic, and problem-solving skills.

Algebra II

(prerequisite: Algebra I, Geometry)

Students will deepen and extend their algebra skills by studying advanced topics designed to prepare them for college-level math. The course focuses on analyzing and modeling relationships using a variety of functions, including linear, quadratic, polynomial, rational, exponential, and logarithmic functions. Students will solve complex equations and systems, work with radicals and complex numbers, and build confidence with algebraic reasoning, graphing, and mathematical communication. Emphasis is placed on problem-solving, connecting concepts across units, and using algebra to interpret real-world situations and data.

College Algebra

(prerequisite: Algebra II)

Students will continue to build their mathematical skills through upper level applications and concepts including functions, rational numbers, and equations. **College Credit Available through HCC 2nd semester as MAT 104: College Algebra.

Pre-Calculus / Trigonometry

(prerequisite: College Algebra)

Students will prepare for college mathematics by exploring advanced function concepts and the foundations of calculus. The course includes an in-depth study of functions and their graphs, including polynomial, rational, exponential, logarithmic, and trigonometric functions. Students will learn trigonometric relationships, identities, and real-world applications, along with topics such as vectors and modeling. The course also introduces key calculus ideas—limits and the concept of the derivative—building the skills and

mathematical reasoning needed for future coursework in calculus and other STEM fields.

Probability and Statistics

(prerequisite: Algebra II)

Students will learn how to collect, organize, analyze, and interpret data to make informed decisions about real-world situations. The course focuses on core statistical practices such as describing distributions, using measures of center and spread, creating and interpreting graphs, and understanding sampling and bias. Students will explore probability concepts, including independent and dependent events, and use data to make predictions and evaluate claims. Emphasis is placed on practical applications, critical thinking, and communicating conclusions clearly using evidence from data.

Consumer Math

(prerequisite: Algebra I, Geometry)

Students will strengthen essential math skills while learning how to apply them to everyday life. The course focuses on practical topics such as budgeting, banking, taxes, credit and loans, interest, income and paycheck calculations, and smart consumer decision-making. Students will also work with measurement, estimation, percentages, and basic statistics to interpret real-world information like bills, receipts, and contracts. Emphasis is placed on problem-solving, financial literacy, and using math confidently in adult life.

Science

Earth & Space Science **R**

Students will explore how Earth works as a dynamic system and how it fits into the larger universe. The course covers interactions among Earth's spheres—geosphere, hydrosphere, atmosphere, and biosphere—including weather and climate, the rock cycle, plate tectonics, natural resources, and Earth's changing surface. Students will also study Earth's place in space by examining the solar system, the Sun–Earth–Moon system, seasons, gravity, and

basic astronomy. Emphasis is placed on observation, scientific reasoning, and connecting course concepts to real-world phenomena.

Biology R

Students will study the science of life by exploring how living things are structured, how they function, and how they interact with their environment. The course begins with the building blocks of life—cells, cell processes, and basic biochemistry—then expands to genetics, heredity, evolution, and the diversity of organisms. Students will also examine how body systems maintain balance and how ecosystems cycle energy and matter. Emphasis is placed on scientific inquiry, lab skills, and using evidence to understand the patterns and processes that connect life from the microscopic level to the world around us.

Chemistry

(prerequisite: Earth & Space Science, Biology)

Students will explore the structure and behavior of matter by examining what substances are made of, how they are classified, and how they change through physical and chemical interactions. The course covers atomic structure, the periodic table, bonding, chemical reactions, and the conservation of mass, with frequent practice using measurement, scientific notation, and basic chemical calculations. Students will develop critical thinking and problem-solving skills through labs, data analysis, and real-world applications such as energy, materials, and environmental chemistry. Emphasis is placed on explaining chemical phenomena using evidence, math, and clear scientific reasoning.

Advanced Biology

(prerequisite: Biology)

Advanced Biology is an in-depth study of life science that builds strong foundations for future coursework in biology and other health/STEM fields. Students begin with an introduction to biochemistry, focusing on the molecules of life and how they support cellular processes. The course then explores cellular structure and function, including how cells communicate, transport materials, and maintain balance. Students will investigate

bioenergetics—how organisms capture, store, and use energy through processes like cellular respiration and photosynthesis—and conclude with biological diversity, examining how life is classified, how organisms are adapted to their environments, and how diversity shapes ecosystems.

Anatomy and Physiology

(prerequisite: Earth & Space Science, Biology)

Students will explore how the human body is structured and how it functions, learning the names and roles of major organs, tissues, and body systems. The course emphasizes body organization, anatomy terminology, and how systems work together to maintain balance and support health. Students will use models, labs, and hands-on activities to connect structure to function, including investigations of the skeletal, muscular, nervous, circulatory, respiratory, digestive, and other systems. During second semester, students will complete a cat dissection to apply what they've learned through a guided, detailed study of anatomy.

Physics

(prerequisite: Earth & Space Science, Biology)

Students will investigate the fundamental laws that explain motion, forces, and energy in the world around us. The course emphasizes measuring and describing how objects move, why they move the way they do, and how energy changes form and transfers between systems. Topics include kinematics, Newton's laws, work and power, momentum, waves, and basic electricity and magnetism, with frequent use of graphs, lab investigations, and mathematical modeling. Students will build problem-solving skills by applying physics concepts to real-world situations and analyzing data to support clear conclusions.

Astronomy

Astronomy offers students the opportunity to study the solar system, stars, galaxies, black holes, and other interstellar bodies. This course covers the origins of astronomy, a brief history of space exploration, the birth and

formation of our solar system, the life and death of stars, explores the theories regarding the origin and evolution of the universe, space, time, dark matter, multiverse theory, and oscillating universe theory.

Physical Education

Advanced PE

Students will perform and participate in various sport-related activities that will help them to maintain an active and healthy lifestyle.

Physical Conditioning

Students will be given repeated opportunities to participate in resistance-training exercises and techniques for the purpose of muscular hypertrophy, strength, and athletic sport training.

Fine Arts

Introduction to Art

Students will be introduced to a wide range of artists, art styles, and hands-on media while building foundational skills in drawing, painting, design, and mixed techniques. The course emphasizes the elements of art (line, shape, form, color, value, texture, and space) and the principles of design (balance, contrast, emphasis, movement, pattern, rhythm, and unity) as students learn how to create purposeful, visually strong artwork. Students will experiment, practice craftsmanship, and develop their own creative voice through projects, critiques, and reflection, while learning to describe and evaluate art using appropriate vocabulary.

2D Art

(prerequisite: Introduction to Art)

Students will develop strong visual art skills through a studio-focused exploration of 2D media, including drawing, painting, printmaking, and digital art. The course emphasizes the elements of art (line, shape, form, color, value,

texture, and space) and principles of design (balance, contrast, emphasis, movement, pattern, rhythm, and unity) as students learn to plan, create, and refine finished artworks. Students will practice technique, composition, and craftsmanship while experimenting with materials and tools, building confidence through project work, critique, and reflection.

3D Art

(prerequisite: Introduction to Art)

Students will explore three-dimensional art through hands-on projects in sculpture, ceramics, and fibers. The course emphasizes building form in space while applying the elements of art (line, shape, form, color, value, texture, and space) and principles of design (balance, contrast, emphasis, movement, pattern, rhythm, and unity). Students will learn construction and finishing techniques—such as hand-building and glazing in ceramics, sculptural methods with a variety of materials, and fiber processes like weaving, stitching, or textile design—while developing craftsmanship, creativity, and problem-solving skills through critique and reflection.

Advanced Art

(prerequisite: 2D and/or 3D Art)

Students will engage in an in-depth, studio-focused study of art while developing a personal style and working with greater independence. The course emphasizes advanced technique, concept development, and thoughtful risk-taking as students plan and create self-directed projects, refine their work through critique, and build a cohesive body of art. Students will also learn self-promotion skills such as photographing and presenting artwork, writing artist statements, assembling a portfolio, and preparing for exhibitions, competitions, scholarships, or postsecondary art opportunities.

Band

Band students will develop musicianship and performance skills by learning and performing a wide variety of music in multiple settings, including marching band, concert band, and pep band. The course emphasizes proper playing technique, tone quality, rhythm, intonation, sight-reading, and ensemble teamwork. Students will participate in rehearsals and public performances throughout the year, building confidence, discipline, and leadership while contributing to school events and the broader community through music.

Jazz Band

Jazz Band students will develop skills in jazz performance by rehearsing and performing an eclectic variety of jazz styles throughout the school year. The course emphasizes swing feel, style and articulation, improvisation basics, listening skills, and strong ensemble communication. Students will learn how to interpret jazz charts, understand common forms and rhythms, and build confidence through regular rehearsals and performances at school and community events.

Choir

In Choir you will... SING! Students will build vocal skills and confidence while exploring a wide variety of musical styles and cultures. The course focuses on healthy vocal technique, harmony, sight-reading, rhythm, and expressive performance, with an emphasis on teamwork and ensemble sound. Choir students will participate in multiple performances throughout the year, including concerts, contests/festivals, and crowd-favorite events like the Pop Show, giving students plenty of chances to grow on stage and have fun making music together.

Theatre

The class is a mixed-grade level class with students from ninth to twelfth grade enrolled together. Students learn about theatre, past and present; theatre, onstage and backstage; and learn to understand and appreciate the theatre process. Students participate in a variety of activities including improvisations, theatre games, acting alone and with a partner, playwriting, casting, and directing. Students in this course are not required to audition for extra-curricular productions; however, it is strongly encouraged, since public performance is a natural extension of the course work. 1st Semester Only.

Forensics

This course is a combination class involving a small portion of acting, interpretation, speaking, and research skills. The main focus of forensics is preparation for competition in all speaking and acting areas. Classwork begins with exploring the different genres of competition. Each student will develop skills in several areas. Class projects include individual acting, interpretation, and speaking events. Competing in KSHSAA events is mandatory. NOTE: Occasional weekend travel is a class requirement. 2nd Semester Only.

Career & Technical Education

Business Economics

In this class we will study how and why people buy what they do when they do. We will study supply, demand, and the ever changing wonders of the market.

Entrepreneurship

Ever want to own/run your own business? You're in the right class! We will cover the wide variety of business topics needed for a successful entrepreneur.

Business Management

Business is all about relationships. Understanding how to work with people is one of the most important skills businessmen and women can learn. In this class we will focus on the relational aspects of managing a business.

Accounting

(prerequisite: Business Economics, Entrepreneurship, and/or Business Management)

Are you all about the Benjamins? In this class we will study how businesses keep track of all the financial aspects of a company.

Principles of Marketing

(prerequisite: Business Economics, Entrepreneurship, and/or Business Management)

Developing ways to persuade customers that your product or service is the right one for them, is an art form. In this class we will be focusing on all of the jingles, commercials, advertisements, and... the four P's? That all makes up the marketing side of business.

Advanced Food Science

(prerequisite: Food Science)

This course explores a more in depth aspect of food chemistry, culinary skills, sanitation, and Servsafe certification processes. Students will participate in many science based labs through hands-on activities. (Can also count as a science credit)

Agriscience

This course is an introductory course designed to expose students to different facets of FFA and the agriculture industry. Students will gain knowledge in animal science, plant science, leadership skills, public speaking, FFA opportunities, and agricultural mechanics. Instruction and student learning will occur through lectures, student projects, group discussions, hands on experiences and FFA experiences.

Horticulture, Floraculture, and Greenhouse Management

(prerequisite: Plant & Soil Science)

This course will walk students through a more in depth understanding of science through plants, nursery and landscape, greenhouses, the floriculture industry, and careers in horticulture. The course will mainly focus on instruction through hands-on techniques of planting, greenhouse operations, and outdoor laboratories.

Plant & Soil Science

This course will lead students through basic plant requirements, anatomy, varieties, plant growth techniques, and soil nutrition. Students will have hands-on planting activities and various instructional methods. (Can also count as a science credit)

Food Science

Instruction will focus around food safety, nutrition requirements, culinary skills, food marketing, and the chemistry breakdown of food. This class will participate in many laboratory procedures and gain knowledge from direct instruction. (Can also count as a science credit)

Ag Welding I & II

Ag welding will allow students to gain hands-on skills that will make them employable in the field of metal fabrication. Students will refine their skills in arc and mig welding and cutting with the oxyacetylene torch. There will be an opportunity to design plans for metal projects, calculate the cost of the project, and implement the project. Eighty percent of the time will be spent in the shop.

Animal Science

Instruction will lead students through animal anatomy and physiology, reproduction, nutrition, health issues, marketing, and animal products. Students will gain knowledge and skills through direct instruction, labs, and field trips. (Can also count as a science credit)

Ag Mechanics (offered every other year)

Instructional areas consist of ag structures, welding, introduction to electricity, and basic small engine knowledge. The majority of instruction will take place in the shop through hands-on projects.

Vet Tech / Animal Health (offered every other year)

(prerequisite: Animal Science)

This course will give students hands-on training in the animal medical industry. Instruction will consist of safety and sanitation, terminology, anatomy and physiology, clinical exams, hospital procedures, parasitology, animal nutrition, principles of disease, of ice management, veterinary math, career exploration, and participation in the vet science CDE.

Ag Communications

Students will practice agricultural communication skills by interviewing others, creating a community service project, establishing a PALS program with elementary, writing feature stories, and creating a resume and cover letter as they discover career opportunities.

Speech

Public Speaking **R**

Students will explore the history of public speaking as well as the various components of presenting a speech, and will compose and present four different kinds of speeches throughout the semester.

Personal Finance

Personal Finance **R**

Personal Finance provides students with an understanding of the concepts and principles involved in managing one's personal finances

General Electives

Student Aide

Available to Seniors, being a student aide means helping a teacher or other staff member with appropriate duties. It requires responsibility and autonomy. Students must be in good standing to become a student aide. Being a student aide is a privilege, and the privilege can be revoked for inappropriate behavior, failing grades, or excessive discipline referrals.

Yearbook

Students will work together to publish the high school yearbook using an online application as well as their writing, photography, and communication skills.

Spanish (I-IV) (Currently available online through Edgenuity)

Students enrolled in Spanish I through IV will study the Spanish language through reading, writing, speaking, and listening.