

High School Course Catalog

Science Department

Biology

*2 semesters / 1 credit / **Required Course***

This course focuses on the scientific method and measurement, basic chemistry, organic compounds, cell structure and function, cell growth and reproduction, classification systems, genes, chromosomes, DNA, genetics, the biology of the human body, and ecosystems.

Environmental Science

*2 semesters / 1 credit / **Required Course***

The students will study basic principles of earth science. The curriculum includes major topics such as energy, weather, climate, and plate tectonics. Students will be given opportunities to analyze and evaluate these topics and how they relate to one another. Diverse learning opportunities include videos, interactive presentations, and projects.

Physical Science

*2 semesters / 1 credit / **Required Course***

This is a pre-physics and pre-chemistry course designed to explore the relationship between the natural and physical world. Standards based energy, matter, motion, forces, mechanics, thermodynamics, waves and optics, electricity and magnetism, atomic particles and structure, chemical and physical properties, bonds and reactions, solutions, and acids and bases.

Chemistry

*2 semesters / 1 credit / **Required Course if not attending KCTC***

This course is designed to help students understand basic chemical principles and master problem-solving skills. Students will develop an understanding of how those concepts and skills are relevant to other courses and their daily lives. Chemical topics covered in the course include basic science concepts, measurements, atomic theory, bonding, stoichiometry, states of matter, solutions, acids & bases, and nuclear chemistry.

Math Department

Algebra I

*2 semesters / 1 credit / **Required Course***

This course introduces students to basic concepts and properties of Algebra. Concepts and skills are introduced algebraically, graphically, numerically, and verbally – often in the same lesson to help students make connections and to address diverse learning styles. Topics of Study: Solving Equations and Inequalities, Linear Equations, Linear Functions, Systems of

Linear Equations and Inequalities, Piecewise Functions, Exponents and Exponential Functions, Polynomials and Factoring, Quadratic Functions, Solving Quadratic Equations, Statistics

Geometry

*2 semesters / 1 credit / **Required Course***

This course introduces students to basic concepts and properties of Geometry. Students use their Algebra skills and learn to think logically to draw conclusions about shapes and geometric figures. Topics of Study: Foundations of Geometry, Parallel & Perpendicular Lines, Transformations, Triangle Congruence, Relationships in Triangles, Quadrilaterals & Other Polygons, Similarity, Right Triangles & Trigonometry, Coordinate Geometry, Circles, Two- and Three-Dimensional Models, and Probability

Advanced Algebra

*2 semesters / 1 credit / **Required Course***

This course builds on concepts learned in Algebra 1 and Geometry. Concepts and skills are introduced algebraically, graphically, numerically, and verbally – often in the same lesson to help students make connections and to address diverse learning styles. Topics of Study: Linear Functions and Systems, Quadratic Functions and Equations, Polynomial Functions, Rational Functions, Rational Exponents and Radical Functions, Exponential and Logarithmic Functions, Trigonometric Functions

Statistics

*1 semester / 0.5 credit / **Required Course***

This course helps students understand and become critical of the data they see in everyday life. They learn the science and art of data and how to display and interpret different types of data. The end of the course includes a data collections project where students collect and interpret their own data and present their findings. Topics of Study: Analyzing One-Variable Data, Analyzing Two-Variable Data, Collecting Data

Personal Finance

*1 semester / 0.5 credit / **Required Course***

The semester-long personal finance course covers all of the essential personal finance topics necessary to become a financially capable student. By the end of this course, students will have a thorough understanding of personal finance topics and be prepared to handle the financial responsibilities that exist after graduation. Topics of Study: Banking, Investing, Insurance, Taxes, Budgeting, Consumer Skills, and Behavioral Economics

Social Studies Department

United States History

*2 semesters / 1 credit / **Required Course***

High School US History examines major events occurring in the United States from the reconstruction period (1870s) to the present. Students will analyze historical events to better

understand the United States' past and make connections to today. This course covers major themes in US history such as change and continuity, the interactions of various groups, economic and technological impacts, and the changing role of the US in the World. The study of US geography will also be incorporated to build contextual understanding as appropriate.

World History

*2 semesters / 1 credit / **Required Course***

High School World History primarily focuses on events from 300 CE to the present. Content covered in middle school (2000 BCE - 300CE) will be reviewed as necessary to refresh their background knowledge. Students will analyze the growth of civilizations, their interactions over time, major technological advancements, political revolutions, and the eventual global convergence and conflicts that have shaped human history. The study of World geography will also be incorporated to build contextual understanding as appropriate.

Government

*1 semester / 0.5 credit / **Required Course***

The goal of government and civics education is to provide students with an understanding of how the United States' government is structured and prepare them to be active participants in this system when they come of age. Students will prepare for this by learning about the foundations of the United States government, the structure and operations of government at various levels (including national, state, local, and tribal), U.S. foreign policy, and the rights and responsibilities of citizenship.

Economics

*1 semester / 0.5 credit / **Required Course***

The study of economics is meant to help students understand the principles that govern the United States' economic system and prepare them to participate in this system as they enter adulthood. Topics covered include supply and demand, the influence of the government on the economy, understanding economic indicators, and foreign trade. Additionally, students will receive an introduction to a wide variety of personal finance skills.

Human Geography

*2 semesters / 1 credit / **Required Course if not attending KCTC***

A Social Studies elective worth one credit. Human Geography is the combined study of physical geography and human cultural aspects. Students will learn about the many different climates, landforms, histories, and cultures of our world and how they all combine to create a rich global community. This class is heavily geography based and will require the study of maps and memorization of country locations.

English Department

Literature Composition I (9th Grade)

*2 semesters / 1 credit / **Required Course***

This course serves as an introduction to high school Language Arts. Concepts and skills such as finding a theme, symbolism, play elements, and features of a novel. Students also develop the foundations of essay writing while applying proper writing conventions.

Major pieces of literature covered: Romeo and Juliet, Watership Down, To Kill a Mockingbird, Miracle Worker, one student-chosen novel around

Literature Composition II (10th Grade)

*2 semesters / 1 credit / **Required Course***

This class delves into a continuation of literature as laid out by the Michigan Content Expectations and Common Core. Students compose several essays throughout the year and a persuasive research paper focused on a controversial issue in society. Writing form, function, and techniques are stressed through a process of peer and teacher feedback and revisions.

Major pieces of literature covered: All Quiet on The Western Front, The Count of Monte Cristo, Midsummer Night's Dream, and one student-chosen, modern literature novel.

British Literature (11th Grade)

*2 semesters / 1 credit / **Required Course***

Students study classic literature from Great Britain and the world in the historical contexts in which they were composed. Students compose several pieces of writing including a research paper around the subject of finance/money management.

Major pieces of literature covered: Beowulf, Macbeth, Jane Eyre, Tale of Two Cities

American Literature (12th Grade)

*2 semesters / 1 credit / **Required Course***

Students read and respond to the writings of American authors. Students compose several essays and writing assignments in response to the literature including a research paper exploring a social injustice in the world today.

Major pieces of literature covered: The Crucible, The Adventures of Huckleberry Finn, Grapes of Wrath, and a student-chosen novel on the theme of social injustice.

Fine Arts

Exploratory Art

1 Semester / 0.5 Credit / Semester 1

This course is a broad overview of art history from the past to the present, informed by contemporary practices. Students will identify major periods of art history while understanding how art changed over time. An emphasis on creating artworks inspired by art history movements is the primary focus of this class while using a variety of different mediums.

Drawing and Design

1 Semester / 0.5 Credit / Semester 2

This course is designed to introduce students to various drawing techniques to learn, develop, and strengthen drawing skills. Students will develop and experiment with different types of subject matter and genres, identifying the elements of art and design for 2D compositions, and creating a variety of work using 2D media.

Symphonic Band

2 Semesters / 1 Credit / Full year commitment

This course is an opportunity to play high quality literature and participate in several additional events in the musical community. The goal is to advance musical skills as well as promote a good work ethic in an encouraging social atmosphere. Our school presents three evening concerts a year, attends the MSBOA band festival, and has additional solo, ensemble, and honor band opportunities.

Physical Education

Physical Education

1 Semester / 0.5 credits / Required Course

Physical Education is an essential and basic part of the total education program. The Physical Education program provides a variety of movement experiences to help all students develop skills, knowledge, and attitudes necessary to function effectively in society. Physical Education includes the following units: sports, net/racquet games, and individual/lifestyle sports.

Health Education

1 Semester / 0.5 credits / Required Course

Health Education contributes to the total development of every student and recognizes the physical, mental, emotional and social characteristics of students. Health Education includes the following units: Social Emotional Health, Nutrition and Exercise, Safety, Alcohol/Tobacco and Other Drugs, Personal Health and Wellness, and Sex Education and HIV Prevention. Each unit is built around the 7 following health skills: Personal meaning, exploring information, analyzing influences, setting goals, making decisions, interpersonal communication, and self management.

Foreign Language

Spanish 1

2 semesters / 1 credit / Required Course

The Spanish Level 1 course is an introduction to the Spanish-speaking world, its language and culture. The goal of this course is to develop students' interpersonal, interpretive and presentational skills in Spanish. Students begin to communicate in Spanish using basic structures to speak, read, listen and write about themselves, their family, school, home, and free time activities.

Spanish 2

*2 semesters / 1 credit / **Required Course***

The goal of this course is for students to communicate in Spanish using basic structures to speak, read, listen and write about their lives, healthy living, eating out, daily routine, shopping around town, and planning a trip. Students continue to develop their communicative and cultural competence by interacting with others in Spanish, listening to and reading text in the target language and making oral and written presentations in Spanish. While students begin to show a greater level of accuracy when using basic language structures, they are also exposed to more complex features of Spanish including how to narrate in the past.

General Electives

Yearbook Computer Applications

1 semester / 0.5 credit / Elective

In this course, students will learn the purpose of and the traits of a good yearbook and create the school's yearbook. They will learn computer skills needed to create a yearbook and necessary communication and photo editing skills. They will be responsible for meeting deadlines to complete their assigned pages in the yearbook and their assigned articles for the digital school newspaper. Topics of Study: What makes a good yearbook, Photo editing and layout using the yearbook program, Creating appropriate yearbook pages, Creating interesting and appropriate newspaper articles

Psychology

1 semester / 0.5 credit / Elective

A Social Studies elective worth one half credit. Simply defined, Psychology is the study of individuals. Students will study how the brain functions and processes outside information in an effort to better understand why humans respond the way we do to our surroundings. In this class, you will be pushed to prepare for college by meeting higher expectations for reading, writing, discussion, and critical thinking.

Great Books/Great Movies

2 semesters / 1 credit / Elective

This course is designed to analyze both literary and cinematic devices used to communicate the meaning of the work. Students develop a deeper appreciation for patterns, motifs, archetypes, and other types of devices.

Major pieces of literature covered: Fahrenheit 451, Hamlet, Great Gatsby, Green Mile, Shawshank Redemption

Multicultural Literature

1 semester / 0.5 credit / Elective

This course introduces students to classical and modern literature from authors from a variety of diverse backgrounds. Students consider the perspectives, techniques used, and impact of writers of color on the literary canon.

Major pieces of literature covered: Things Fall Apart; Behold, the Dreamers; Kite Runner, A Thousand Splendid Suns, In the Time of the Butterflies

Fundamentals of Speech

1 semester / 0.5 credit / Elective

This course introduces students to public speaking. The course focuses on identifying effective speech giving strategies, developing providing speech analysis and constructive feedback. Students give several formal and informal speeches throughout the semester.

Topics of study: speech analysis, introduction speech, informative speech, persuasive speech, demonstration speech, and debate.

History of the Holocaust

1 semester / 0.5 credit / Elective

A Social Studies elective worth one half credit. This course will educate students about the many causes of, stages of, and short/long-term impacts of the Holocaust. Students will also learn about other genocides and human rights abuses throughout human history. In this class, you will be pushed to prepare for college by meeting higher expectations for reading, writing, discussion, and critical thinking.

Anatomy

1 semester / 0.5 credit / Elective

This course is designed to introduce students to human anatomy and some physiology, with emphasis on the systems of the body and how they are interrelated. The areas covered include the basic anatomy terminology, cell and tissue structure, and the 11 systems of the human body, (integumentary, skeletal, muscular, nervous, endocrine, circulatory, lymphatic, digestive, respiratory, urinary and reproductive - male and female).

Ecology

1 semester / 0.5 credit / Elective

This course is designed to immerse students in the physical, biological, and earth systems sciences that shape our environment. Scientific concepts, principles and modern science practices allow students to analyze environmental issues, both natural and human induced, and engage in evidence-based decision making in real world contexts.

Extra-curricular

Jazz Band

Full-year commitment

Students who have auditioned or proven themselves able to positively handle the rigor of the music and the extra rehearsal and work schedule meet after school on Tuesdays and Thursdays throughout the school year to enjoy listening to jazz legends and to prepare for three evening concerts and a few spring jazz events during the school day.