

# Wood County Alternative School

## Course Descriptions

### High School Courses

#### Language Arts

<p><b>English I</b> This course addresses strategies for reading comprehension, recognition of text structure in exposition and narrative, comprehension of different genres of text, the steps for writing an essay and applying the five-step writing process. The course also addresses basic skills in grammar, punctuation, word usage, spelling, vocabulary, and research and explains how to punctuate and manipulate sentences to produce more effective writing. <b>Credits: 1.0</b></p>	<p><b>English II</b> This course helps students develop skills in grammar, punctuation, word usage, spelling, vocabulary and communications skills, such as giving speeches, using visual aids, and workplace communications. This course also focuses on strategies for reading comprehension, explains the writing process, helps students compose personal narratives and literary responses, and provides instruction on perspective and argument. <b>Credits: 1.0</b></p>
<p><b>English III</b> In this course, students continue to develop skills in grammar, punctuation, word usage, spelling, vocabulary, and communication. This course also teaches students about complex writing processes, types of writing, reading strategies, study skills, and modes of reasoning. Additionally, students read works from different periods of American literature and examine these texts to learn about various literary devices, forms, styles, techniques, and influences. <b>Credits: 1.0</b></p>	<p><b>English IV</b> In this course students continue to develop skills in grammar, punctuation, word usage, spelling, vocabulary, and communication. This course also teaches students about complex writing processes, types of writing, reading strategies, study skills, and modes of reasoning. Additionally, students read works from different periods of British literature and examine these texts to learn about various literary devices, forms, styles, techniques, and influences. <b>Credits: 1.0</b></p>

#### Mathematics

<p><b>Integrated Math I</b> This course teaches students how to simplify expressions and solve linear equations, introduces basic geometric terms and logic, reasoning, and proof and addresses linear equations in a graphical sense, and parallel and perpendicular lines, first from an algebraic perspective, followed by proving associated theorems using geometry. This course also teaches students how to solve proportions, use square roots, explore exponents, simplify polynomials, factor and solve quadratic equations, and apply these skills to geometry topics such as quadrilaterals, polygons, area, and volume. <b>Credits: 1.0</b></p>	<p><b>Integrated Math II</b> This course teaches students about linear equations and inequalities, functions and families of functions, triangles, and how to apply their knowledge to solve systems and prove theorems. This course also teaches students about geometrical relationships in triangles and plane figures, special right triangles, basic trigonometry, radicals, polynomials, rational equations, probability and statistics. <b>Credits: 1.0</b></p>
<p><b>Integrated Math III</b> This course reviews graphing in the coordinate plane, graphical and algebraic approaches to solving systems of equations and constructions, isometric transformations, symmetry, and dilations. This course also teaches students about a variety of nonlinear relationships, circles and conic sections, arithmetic and geometric sequences and series, and how to solve quadratic equations. <b>Credits: 1.0</b></p>	<p><b>Integrated Mathematics IV</b> In this course students will learn about analyzing data, standard deviation, and normal distributions. They will also learn about arithmetic and geometric sequences and their series, rational and inverse functions, radians, degrees, and the unit circle. This course also teaches students about trigonometric functions, inverse trigonometric functions, trigonometric identities, sum and difference formulas, applications of trigonometry, polar coordinates, and vectors. They will also learn about functions, polynomial functions, exponential functions, and logarithmic functions. <b>Credits: 1.0</b></p>

## Mathematics (Continued)

<p><b>Pre-Algebra</b> This course addresses concepts related to writing algebraic expressions, performing operations with integers and fractions, factoring, simplifying expressions with exponents, solving one-step equations and inequalities. This course also addresses writing and solving proportions and percent problems, recognizing linear functions and their graphs, identifying polygons and solids, displaying data, finding probabilities, computing area, surface area, and volume, and solving multi-step equations that contain integers, fractions, and decimals. The Distributive Property and equations and formulas that reflect real-world situations are presented. <b>Credits: 1.0</b></p>	<p><b>Algebra 1</b> This course covers such key concepts as variables, function patterns, graphs, operations with rational numbers, and properties of rational numbers. Students solve linear equations and inequalities, and study slope, and graphing linear functions. This course also covers exponents, polynomials, and factoring. It also helps students study quadratic equations and functions, radical expressions and equations, rational expressions and functions, and study counting methods. <b>Credits: 1.0</b></p>
<p><b>Algebra 2</b> In this course, students solve equations, inequalities, systems and problems using matrices, inverse matrices, matrix operations, and determinants. Students also learn about different functions and are introduced to the imaginary number <math>i</math> and find complex solutions to equations. This course also introduces exponential and logarithmic functions, conic sections, probability, statistics, sequences, and series. <b>Credits: 1.0</b></p>	<p><b>Geometry</b> This course addresses basic skills in geometry including reasoning, developing proofs, identifying geometric figures, and constructing figures. This course also teaches students about the properties of right triangles and trigonometric ratios, transformations of plane figures, and the parts of a circle and their properties. Additionally, students will develop and apply formulas for area, surface area, and volume of two- and three-dimensional figures. <b>Credits: 1.0</b></p>
<p><b>Precalculus</b> This course presents students with a formal study of functions, an analysis of sequences and series, counting principles, the binomial theorem, and probability. Students will use technology to employ multiple approaches to problem solving and data modeling. This course also includes topics on trigonometry, parametric curves, the polar coordinate system, and complex numbers in polar form. Students will solve problems using the Laws of Sines and Cosines and will also analyze vectors and conics, study systems of equations and matrices, and solve systems using matrices. Limits and continuity are introduced. <b>Credits: 1.0</b></p>	<p><b>Statistics</b> This course addresses descriptive statistics topics including frequency distributions, histograms, graphs, and measures of center and spread. Probability topics include addition rules, multiplication rules, conditional probabilities, counting rules, binomial distribution, and normal distribution. Inferential statistics topics include estimations for population measures, hypothesis testing, correlation, goodness-of-fit, and statistical process control. <b>Credits: 0.5</b></p>
<p><b>Trigonometry</b> This course addresses analyzing functions, transformations, and inverse functions. Students will also learn about radians, the unit circle, right-triangle trigonometry, trigonometric functions, inverse trigonometric functions, trigonometric identities, and trigonometric equations. Additional topics include vectors, conic sections, parametric curves, and the polar coordinate system. <b>Credits: 0.5</b></p>	

## Science

### Biology

This course addresses key concepts and processes from chemistry, cells, cellular respiration, photosynthesis, genetics, and DNA. The scientific method and foundational chemistry facts are presented to assist students in the study of biology. This course also addresses key concepts and processes of evolution, classification, ecology, and human anatomy. An overview of human body systems, as well as, defining structures of bacteria, protists, fungi, plants, and animals are also explored.

**Credits:** 1.0

### Earth Science

This course addresses major concepts such as the materials which compose Earth, the rock cycle and types of rocks, Earth's resources, formation and movement of soil, glaciers, deserts, and alluvial landscapes, earthquakes, volcanoes, plate tectonics, mountain building, and geologic time. This course also covers concepts such as the ocean floor, seafloor sediments, waves, tides, and shoreline processes, characteristics of the atmosphere, precipitation, air pressure and wind, storms, climate, early astronomy, Earth-Moon-Sun interactions, and Solar System. Laboratory concepts appear in videos, careers in Earth Science are explored, and key scientists are called out through portraits and biographies.

**Credits:** 1.0

### Environmental Science

This course presents relationships between organisms and how these relationships relate to the functioning of ecosystems. Students learn the key concepts and processes of nutrient cycling, biomes, pollution, energy resources, and habitat destruction. The course also covers ways to promote biodiversity and create a sustainable future.

**Credits:** 0.5

### Physical Science

This course addresses key chemistry concepts and processes from properties and states of matter, atomic structure, organization of the periodic table, types of chemical bonds and reactions, solutions, carbon chemistry, and nuclear chemistry. This course also addresses key physics concepts and processes from force and motion, work, power, machines, energy, optics, electricity, and magnetism. Concepts are explored through animations and videos and will assist students in advanced chemistry and physics courses.

**Credits:** 1.0

### Health

This course addresses topics in mental health, social health, nutrition, physical fitness, substance abuse, human development, and preventing disease. The course emphasizes the physical and emotional benefits of making healthful choices and discusses consequences of unhealthful behaviors. Critical thinking is encouraged through the use of open-ended questions, assessments, and videos that present real-life situations.

**Credits:** 0.5

### Physics

This course addresses concepts of mechanics, wave behavior, and thermodynamics, Newton's laws of motion, thermal properties of matter, and thermodynamic systems. This course also contains lessons on electricity, magnetism, optics, the interactions among electric charges, properties of electric and magnetic fields and forces, and the characteristics of electromagnetic waves. Some of the basic concepts of quantum physics are presented as well. An understanding of Algebra and Trigonometry is required.

**Credits:** 1.0

### Chemistry

This course addresses key concepts and processes from states of matter, atomic theory, organization of the periodic table, types of chemical bonds and reactions, the naming and formulas of chemicals, chemical reactions, and stoichiometry. The field of chemistry in relation to the scientific method is also explained. This course also addresses properties of solids, liquids, and gases, state changes, solutions, flow of energy, enthalpy, heat, entropy and free energy, rates of reactions, equilibrium, acid-base theories, oxidation and reduction, electromagnetic cells, functional groups, polymerization, biochemicals, and nuclear chemistry. The course explores concepts through lessons and lab videos.

**Credits:** 1.0

## Social Studies

<p><b>Economics</b> This course addresses concepts of economics, including a review of the American free enterprise system. Students learn about markets, business and labor, and banking and finance in the microeconomics sections, and then learn about measuring economic performance, the government's role in the economy, and international trade and development in the macroeconomics section. <b>Credits: 1.0</b></p>	<p><b>U.S. History</b> This course contains lessons addressing historical periods from the American Revolution to globalization and the twenty-first century. The lessons address key concepts, important historical figures, and significant events to help students gain an understanding of the political, economic, military and social structures of the early years of the United States through its emergence as a global superpower. <b>Credits: 1.0</b></p>
<p><b>Geography</b> This course addresses key concepts of physical and human geography and presents information about the United States, Canada, Latin America, Western Europe, Central Europe, Northern Eurasia, Central and Southwest Asia, Africa, South Asia, East Asia, the Pacific world, and Antarctica. <b>Credits: 1.0</b></p>	<p><b>World History</b> This course contains lessons addressing historical periods from Prehistory through Globalization in the 21st century. The objectives of the lessons are directly aligned to current standards. Each multimedia lesson is designed to teach the major concepts for each historical period through text, visual aids, activities and assessments. <b>Credits: 1.0</b></p>
<p><b>Government</b> This course covers the foundations of American government, political behavior, and the three branches of the federal government. <b>Credits: 1.0</b></p>	

## Electives

<p><b>Fitness Lifestyle Design</b> In this course, students will learn healthy habits of body and mind that will lead to a healthier lifestyle. They will measure their beginning fitness level and nutrition knowledge, creating an individual plan for achieving their goals. <b>Credits: 0.5</b></p>	<p><b>Career Success</b> This course assists students in establishing a positive and proactive career mindset early and consistently in their academic process to help insure career compatibility and success. Topics include personalized career assessment, enhancing transferable career skills, developing a personal career brand, and career position seeking skills. <b>Credits: 0.5</b></p>
<p><b>Personal and Family Finance</b> This course introduces students to basic financial habits such as setting financial goals, budgeting, and creating financial plans. Students will learn more about topics such as taxation, financial institutions, credit, and money management. The course also addresses how occupations and educational choices can influence personal financial planning, and how individuals can protect themselves from identity theft. <b>Credits: 1.0</b></p>	<p><b>Music Appreciation</b> Music is part of everyday lives and reflects the spirit of our human condition. To know and understand music, we distinguish and identify cultures on local and global levels. This course will provide students with an aesthetic and historical perspective of music, covering a variety of styles and developments from the Middle Ages through the Twentieth First Century. Students will acquire basic knowledge and listening skills, making future music experiences more informed and satisfying. <b>Credits: 1.0</b></p>
<p><b>Gothic Literature: Monster Stories</b> From vampires to ghosts, these frightening stories have influenced fiction writers since the 18th century. This course will focus on the major themes found in Gothic literature and demonstrate how the core writing drivers produce, for the reader, a thrilling psychological environment. Terror versus horror, the influence of the supernatural, and descriptions of the difference between good and evil are just a few of the themes presented. <b>Credits: 1.0</b></p>	<p><b>Mythology &amp; Folklore</b> Since the first people gathered around fires, mythology and folklore has been used as a way to make sense of humankind and our world. Beginning with an overview of mythology and different kinds of folklore, students will journey with ancient heroes as they slay dragons and outwit gods, follow fearless warrior women into battle, and watch as clever monsters outwit those stronger than themselves. They will explore the universality and social significance of myths and folklore, and see how these are still used to shape society today. <b>Credits: 1.0</b></p>

<p><b>History of the Holocaust</b>          Holocaust education requires a comprehensive study of not only times, dates, and places, but also the motivation and ideology that allowed these events. In this course, students will study the history of anti-Semitism; the rise of the Nazi party; and the Holocaust, from its beginnings through liberation and the aftermath of the tragedy. The study of the Holocaust is a multidisciplinary one, integrating world history, geography, American history, and civics. High school students will gain an understanding of the ramifications of prejudice and indifference, the potential for government-supported terror, and they will get glimpses of kindness and humanity in the worst of times.  <b>Credits: 1.0</b></p>	<p><b>Human Geography</b>          How do language, religion, and landscape affect the physical environment? How do geography, weather, and location affect customs and lifestyle? Students will explore the diverse ways in which people affect the world around them and how they are affected by their surroundings. Students will discover how ideas spread and cultures form, and learn how beliefs and architecture are part of a larger culture complex. In addition to introducing students to the field of Human Geography, this course will teach students how to analyze humans and their environments.  <b>Credits: 1.0</b></p>
<p><b>Great Minds in Science</b>          Is there life on other planets? What extremes can the human body endure? Can we solve the problem of global warming? Today, scientists, explorers, and writers are working to answer all of these questions. Like Edison, Einstein, Curie, and Newton, the scientists of today are asking questions and working on problems that may revolutionize our lives and world. This course focuses on 10 of today's greatest scientific minds. Each unit takes an in-depth look at one of these individuals, and shows how their ideas may help to shape tomorrow's world.  <b>Credits: 1.0</b></p>	<p><b>Health Science: The Whole Individual</b>          Will we ever find a cure for cancer? What treatments are best for conditions like diabetes and asthma? How are illnesses like meningitis, tuberculosis, and the measles identified and diagnosed? Health sciences provide the answers to questions such as these. In this course, students will be introduced to the various disciplines within the health sciences, including toxicology, clinical medicine, and biotechnology. They will explore the importance of diagnostics and research in the identification and treatment of diseases. The course presents information and terminology for the health sciences and examines the contributions of different health science areas.  <b>Credits: 1.0</b></p>
<p><b>Life Management Skills</b>          This course guides students as they deal with important decisions by providing them with the facts they need. Students will learn how to deal with real issues that impact their lives every day, such as nutrition, substance abuse, stress, and their health.  <b>Credits: 0.5</b></p>	<p><b>Thinking and Learning Strategies</b>          In this course, through reading, writing, and math activities, students will develop critical thinking skills and test-taking strategies. Students will also gain reading, writing, organization, and study strategies.  <b>Credits: 0.5</b></p>
<p><b>Real World Parenting</b>          What is the best way to care for children and teach them self-confidence and a sense of responsibility? Parenting involves more than having a child and providing food and shelter. Learn what to prepare for, what to expect, and what vital steps parents can take to create the best environment for their children. Parenting roles and responsibilities, nurturing and protective environments for children, positive parenting strategies, and effective communication in parent/child relationships are some of the topics covered in this course.  <b>Credits: 1.0</b></p>	

## Middle School Courses

### Language Arts

Middle School Language Arts courses are designed to allow for flexible combinations of content. It is recommended that two topics are selected. The following topics are available:

- Basic Reading
- Basic Writing
- Grammar
- Literature
- Writing
- School and Job Skills

### Mathematics

#### Math Grade 6

In this course, students develop their skills in addition, subtraction, multiplication and division of decimals, integers, and fractions. Students write and solve equations and inequalities. They also display data in tables and graphs, along with finding the measures of central tendency. Students solve problems involving area, surface area, and volume. The concepts of ratios and proportions are also presented.

#### Math Grade 7

The course covers operations with decimals, integers, exponents, factors, and fractions. It also addresses ratios, rates, and proportions. Students solve equations and inequalities, and they solve percent problems using equations and proportions. They also find the perimeters and areas of different geometric shapes and the surface areas of solids. Students investigate linear relationships, and they learn how to display and analyze data.

#### Pre-Algebra

This course addresses concepts related to performing operations with integers and fractions, factoring, and simplifying expressions with exponents. The course shows how to solve multi-step equations and inequalities, and it presents concepts related to writing and solving proportions and percent problems. Students learn to recognize linear functions and their graphs, identify polygons and solids, solve for area and volume, and display data.

### Science

#### Earth Science

The Earth Science course begins with a study of the Earth's interior structure, forces, and types of rock. Earth's topography is covered next, including mountains and oceans and forces that form and change surface features over time. Next, students learn about the solar system, star formation, and current theories concerning the nature of the universe. The course is completed by a study of the Earth's atmosphere, including energy transfer, wind, weather, and climate.

#### Physical Science

The Physical Science course begins with an investigation of the elements of matter and their properties and states, followed by a study of chemical compounds, chemical bonds, and reactions. Next, students turn their attention to the topics of motion, forces, and energy, followed by an investigation of magnetism and electricity, including semiconductors and digital devices. The course concludes with a study of wave phenomena, including sound, light, and radio waves.

#### Life Science

The Life Science course begins with a review of measurement skills and the scientific method. Then students learn to classify organisms based on taxonomy, domains, and kingdoms. Cell structure, function, and processes are covered next, along with DNA, heredity, and the theory of evolution. The systems of the human body are presented, followed by extensive coverage of biological ecosystems, habitats, organism populations, and environmental issues.

## Social Studies

### American History

The American History course presents a chronological history of the American experience from the earliest times to the present. It covers topics such as, colonial America, the American Revolution, and issues faced by the early republic. It also covers westward expansion, the Civil War, industrialization, WWI, the Great Depression, WWII, the Cold War, Civil Rights, and the Vietnam War. Finally, students learn about the challenges faced by the United States in the twenty-first century.

### World Studies

The World Studies course provides a unique balance of history, geography, and culture; it expands students' understanding of each world region through a focus on its major countries. Additionally, students learn the foundations of geography. Regions covered include Africa, Asia and the Pacific, the United States and Canada, Europe and Russia, and Latin America. The history and geography of the ancient world and medieval times to present day are also included.

## Electives

### Career Exploration

What career are you best suited for? In this course, students will explore career options in many different fields including business, health science, public administration, the arts, and information technology.

### Orientation to Art 2D

In this course, students will experience the creative processes used by all artists. They will learn how to analyze, interpret, and evaluate art. At the end of this course, they will have a portfolio of work that demonstrates their own skill and creativity as an artist.

### Photography: Drawing with Light

Students see photographs every day on television, on the Internet, and in magazines and newspapers. What makes a great photograph? How did the artist capture a story? What makes a great picture? What are careers in photography? In this course, students learn and apply fundamental skills to use a camera and take photographs of animals, people, and landscapes. Students gain an understanding of how photography can be a means of documentation or high art. Students examine photographic careers and explore self-reflection to progress their creative growth as they develop a photographic portfolio. This course helps students select subjects, take a photograph, and print and display memories!

### Reading I

In this course, students will read a variety of interesting stories, watch videos, and participate in class activities. Through fiction, nonfiction, and poetry, students will learn new vocabulary and comprehension skills.

### Journalism: Tell Your Story

Who? What? When? Where? Journalism provides us with the answers to these questions for the events that affect our lives. In this course, students will learn how to gather information, organize ideas, format stories for different forms of news media, and edit their stories for publication. The course will also examine the historical development of journalism and the role of journalism in society.