

HUNTLAND HIGH SCHOOL COURSE DESCRIPTIONS

ENGLISH

English I, II, III, IV courses seek to integrate the standards of reading, writing, viewing and representing, and speaking and listening. Students will work to comprehend and produce a wide variety of texts, including traditional works of literature, practical and persuasive forms of communication that involves speaking and listening skills, and the use of appropriate technology and media form. The course will emphasize the communication and critical thinking skills that empower student to function effectively in a rapidly changing world.

English I, II, III, and IV (Honors) require specific assigned readings during the summer. These courses are designed for either the technical-prep or college-prep student. Honors English provides an option for students who desire a more academically challenging course.

Journalism (for elective credit only-does not count toward the required English credits) is designed for students who serve on the annual staff or newspaper staff. Students will study thinking and organizational skills, interviewing and broadcasting, composition and mechanics, as well as layout and makeup, business management, and career implications. Enrollment requires the approval of the yearbook sponsor.

MATHEMATICS

Algebra I includes the use of problem solving situations, physical models, and appropriate technology to extend thinking and engage student reasoning. Problem solving situations will provide all students an environment that promotes communication and fosters connections within mathematics to other disciplines and to the real world. The use of appropriate technology will help students apply mathematics in an increasingly technological world. The concepts emphasized in the course include functions, solving equations, slope as rates of change, and proportionality.

Geometry is a course that helps to develop clear and precise reasoning skills; it includes the use of problem situations, physical models, and appropriate technology to investigate geometric concepts, relationships, and systems. The concepts/topics emphasized in the course include measurement, geometric patterns, coordinate geometry, two-and three-dimensional figures, transformational geometry, and similarity. The course includes an introduction to trigonometry as well as basic procedures involved in the construction of geometric figures. This course provides a basis for the more advanced courses in mathematics and many vocational courses.

Algebra II continues with topics learned in Algebra I. This course includes an advanced study of number sense and number theory; estimation, measurement, and computation; patterns, functions, and algebraic thinking; statistics and probability; and spatial sense and geometric concepts. This course serves as a critical step to the other higher-level math courses.

Advanced Algebra and Trigonometry provides study in advanced mathematics. Topics to be studied include trigonometric functions, applications of trigonometry, functions, matrices, and sequences and series.

Calculus includes a thorough study of functions, graphs, and limits; asymptotic and unbounded behavior; continuity as a property of functions; second derivatives; applications of derivatives; computation of derivatives, integrals, the fundamental theorem of Calculus; antidifferentiation, and numerical approximations to definite integrals.

SCIENCE

Physical Science is a course that explores the relationship between matter and energy. This course provides the knowledge, prerequisite skills, and habits of mind needed for problem solving and ethical decision-making about matters of scientific and technological concern. This course provides a basic foundation for advanced studies in chemistry and physics. Using available technology, students will investigate the following: force and motion, structure and properties of matter, interactions of matter, and energy.

Biology is a course that introduces students to the world of living things. Using available technology, students will investigate the world around them. This course provides a foundation for advanced biological studies and personal career choices. Students will explore the following: basic life processes at the molecular, cellular, systemic, organismal, and ecological levels of organization within the hemisphere; interdependence and interactions within the environment to include relationships, behavior, and population dynamics; cultural and historical scientific contributions of men and women; evidence that supports biological evolution; and current and emerging technologies.

Chemistry is a course that explores the properties of substances and the changes that substances undergo. Laboratory work allows students to observe various chemical reactions and become familiar with laboratory procedures. Specific topics studied include: atomic structure; matter and energy; interactions of matter; and properties of solutions and acids and bases.

Ecology is a laboratory science course that enables students to develop an understanding of the natural and man-made environment and the environmental problems the world faces.

Anatomy and Physiology is the study of the human anatomy and physiological functions as well as descriptive results of abnormal physiology with clinical consequences. Students are expected to use the appropriate medical terminology. This course is highly recommended for serious students who are planning a Health Science focus.

SOCIAL STUDIES

U.S. History is a continuation of the study begun in the eighth grade. The content emphasis for this course begins in the last half of the nineteenth century with the development of America as an industrialized nation, poised to emerge as a world leader. The United States in the twentieth century is the major focus as the American people endure world wars, economic depression, and Cold War. The struggle for civil rights by minorities, the changing role of women, and the dramatic impact of the technological advances characterize the post-war years, concluding with the study of contemporary world.

U.S. Government is a study of the constitutional principles, functions and administration of American, local, state, and federal governmental structures. U.S. Government is designed to help students better understand their government and learn how to participate intelligently in the governmental process.

Economics is a required course. The study of economics provides students with insight into the economic choices they and their families make every day and the impact that both national and international economic conditions have on these choices. As students compare and contrast various economic systems, they not only prepare themselves to function as consumers in the American free enterprise system, but they also have the opportunity to apply methods of framing and testing hypothesis to find answers to economic problems.

World History includes a comparative study of ancient civilizations, their achievements, and their subsequent influences on modern society. A chronological approach to world history begins as hemispheric interactions intensify with the increase in trade and continues with the development of nation-states and the advent of the industrial revolution. A study of the contemporary world includes an understanding of the major sources of tension and conflict as well as worldwide scientific, technological, and cultural trends.

Sociology examines the dynamics and models of individual and group relationships.

Psychology examines the development of the individual and the personality.

World Geography includes the study of people, places, and environments at local, regional, national, and international levels from the spatial and ecological perspectives of geography.

FOREIGN LANGUAGE

Spanish I is an introductory study of the language and the people who speak Spanish. The fundamental skills of communication are developed through reading, listening, writing, and speaking the language.

Spanish II explores the workings of the language to a greater extent than Spanish I through an emphasis on the expression of ideas in Spanish and the study of Hispanic culture.

FINE ARTS

Visual Art I is designed for the student with no previous art training to learn the basics in drawing, shading, perspective, color, design, lettering, positive and negative space, figure drawing, portraits, pastels, painting, and other art skills. Art history, art criticism, art cultures, and art appreciation are also studied.

General Music is a course that seeks to give students an understanding of the elements, history and role of music in today's society. A comprehensive and sequential program of study gives students the opportunity to appreciate the performance as well as the creation of musical pieces. The appropriate correlation between music and other academic areas is included.

Instrumental Music (Meets criteria for Honors Scholars only when taken as the seventh and eighth credits in Instrumental Music) provides students the opportunity to play musical instruments in concert performances and marching band. Majorettes and flags are included. Instrumentalist must already play an instrument. Majorettes and flags are selected through try outs.

OTHER

Lifetime Wellness is defined as a lifelong process of positive lifestyle management that seeks to integrate the emotional, social, intellectual, and physical dimensions of self for a longer more productive and higher quality of life. Specific topics to be studied include disease prevention, mental health, nutrition, personal fitness and related skills, safety and first aid, sexuality and family life, and substance use/abuse.

Driver Training is designed to instruct students in driving techniques. Seat belt safety and the problems of D.U.I. are emphasized. Students will learn traffic laws and will have on-road driving experience.

Physical Education includes a wide variety of sports and related activities, which contribute to the social, mental, emotional, and physical needs of the students. General topics studied include games/sports, gymnastics, physical fitness, and rhythmic movement.

CAREER & TECHNICAL EDUCATION

FAMILY AND CONSUMER SCIENCES

Child Development is a specialized course that prepares students to understand the physical, social, emotional, and intellectual growth and development of children. The course is designed to help young people acquire knowledge and skills essential to the care and guidance of children as a parent or caregiver. Emphasis is on helping students create an environment for children that will promote optimum development.

Family and Consumer Sciences is a comprehensive, foundation course designed to assist students in developing core knowledge and skills needed for successful life planning and management.

Family and Parenting focuses on the significance of the family as a basic unit of society and the impact of parenting roles and responsibilities on the well-being of individuals and society.

Personal Finance is a course designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets; simulate use of checking and saving accounts; demonstrate knowledge of finance, debt, and credit management; and evaluate and understand insurance and taxes.

Teaching as a Profession is a course designed to capture the interest of secondary students as potential teachers, introduce students to teaching as a profession, and foster respect for the teaching profession. Students will gain knowledge and skills that will establish a foundation for a successful pathway to a teaching career.

AGRICULTURAL EDUCATION

Livestock Management provides knowledge and skills needed for successful work (entry level to management) in the livestock industry.

Agricultural Power and Equipment is an applied-knowledge course in agricultural engineering with special emphasis on laboratory activities involving small engines, tractors, and agricultural equipment. The standards in this course address navigation, maintenance, repair, and overhaul of electrical motors, hydraulic systems, and fuel powered engines as well as exploration of a wide range of careers in agricultural mechanics.

Horse Science is designed to develop basic understanding of equine handling, health, maintenance, reproduction, selection and management.

Principles of Agricultural Mechanics is a course introducing students to basic skills and knowledge in construction and land management for both rural and urban environments. This course covers topics including project management, basic engine and motor mechanics, land surveying, irrigation and drainage, agricultural structures, and basic metalworking techniques.

Principals of Agriculture is a course designed to develop the basic theories and principles involved in animal science, agribusiness, agricultural mechanics, and natural resource management. Students are provided information about various agricultural careers

Veterinary Science challenges students to use advanced technologies and medical treatments to maintain the health of animals.

CRIMINAL JUSTICE

Criminal Justice I is the first level of study of criminal justice careers. It will prepare students for work-related knowledge and skills for advancement into the second level of criminal justice careers. Course content focuses on areas comprised of the three components of the criminal justice system, the police, courts, and corrections.

Criminal Justice II will offer an in-depth study of criminal justice in which current criminal justice careers issues will be discussed and debated. Local, state, federal, and international laws will be analyzed. Subject matter will include a comparison of the criminal justice careers in the United States with other countries.

Criminal Justice III will provide students with an opportunity to explore the basic processes and principles of forensic science as it relates to criminal investigation. Students will learn the importance of the identification, collection, and processing of evidence and of its contribution to the criminal investigation. Students will learn of the legal responsibilities and challenges which the forensic investigator may encounter from initial response to the court room.