

# **Comanche High School Course Guide**



**2023-2024**

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# ENGLISH LANGUAGE ARTS

## ENGLISH 1

Students will read and respond, both orally and in writing, to multicultural literature in various forms, including novels, dramas, poetry, nonfiction, and short stories. Students will draft, revise and edit their writing using the conventions of grammar and usage. Students will learn literary terms and focus on vocabulary development. *1 credit*

## HONORS ENGLISH 1

This course helps develop students wishing to take advanced or dual credit courses. Students integrate literature and reading concepts and skills. Students also use the writing process to integrate grammar and mechanical skills while employing reading concepts and strategies to survey literary genres, including short stories, novels, dramas, poetry, and nonfiction. *1 credit*

## ENGLISH 2

Students will continue to increase and refine their communication skills. Students are expected to plan, draft, and complete written compositions regularly. Students edit their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English and produce final, error-free drafts. Students will practice all forms of writing with a concentration on persuasive writing. The personal forms of writing may include a response to literature, a reflective message, or an autobiographical narrative. Students will read extensively in multiple genres from world literature, such as reading selected stories, dramas, novels, and poetry. Students will also regularly study and use vocabulary (ACT/SAT words). *1 credit*

## HONORS ENGLISH 2

Pre-AP English 2 meets the requirement for English 2 with expectations of more in-depth and intense standards. The curriculum will focus on content integrating basic skills, higher-order thinking skills, research skills, and furthering knowledge of literary terms. The main differentiation between regular and honors will be the pace and depth of study. Activities will emphasize the process of completing a quality product. *1 credit*

## ENGLISH 3

Students will continue to increase and refine their communication skills. They participate in the writing process regularly. Students practice all forms of writing. Emphasis is placed on writing, reading and critical thinking, literary analysis, vocabulary, grammar, and communication. English 3 students read in multiple genres from American literature and other literary periods. Students learn literary forms and terms associated with selections being read. *1 credit*

## COLLEGE ENGLISH 3

**This course duals with high school English 3.**

**ENGL 1301. Composition I.** English 1301 explores oral and written composition principles. The course emphasizes language study and the mechanics of writing. Additionally, we survey American literature up to the twentieth century. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

**ENGL 1302. Composition II.** English 1302 introduces students to various literary modes, particularly American literature in the twentieth century. Additionally, the course continues English 1301's emphasis on writing. Prerequisite: successful completion of English 1301 or equivalent. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

## BUSINESS ENGLISH

In Business English, students enhance communication and research skills by applying them to the business environment, in addition to exchanging information and producing properly formatted business documents using emerging technology. *1 credit; TEA Pre-req: English 3*

#### **COLLEGE ENGLISH 4**

**This course duals with high school English 4.**

**ENGL 2322. British Literature I.** A general survey of the major works in English literature from Anglo-Saxon times to the Restoration and 18<sup>th</sup> Century. Prerequisite: successful completion of English 1302 or equivalent. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

**ENGL 2323. British Literature II.** A study of British literature's masterpieces from the era of Romanticism to modern contemporary forms of literature. Prerequisite: successful completion of English 1302 or equivalent. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

#### **COLLEGE PREP ENGLISH**

This course is a college preparatory English course for seniors who have not tested college ready in reading/writing. By successfully completing the college preparatory course, students may skip the developmental courses in this area and enroll directly in college-level courses at Ranger College. There is no charge for this course. This course can serve as the 4<sup>th</sup> credit of English. *1 credit*

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## **SOCIAL STUDIES**

#### **WORLD GEOGRAPHY**

Students will examine people, places, and environments locally, nationally, and internationally. This course is “bundled” to consider the world regionally, moving from continent to continent to study regions of the world through a geographer’s eyes, focusing on the physical systems and processes that shape the physical landscape and on how humans interact with the environment. *1 credit*

#### **HONORS WORLD GEOGRAPHY**

This course will provide an in-depth world-regional approach to the world’s people, places, and environments. Students will develop a mastery of the five themes of geography as they learn about the world’s population and cultural characteristics, its countries and regions, landforms and climates, natural resources and natural hazards, economic and political systems, and migration and settlement patterns. Extensive use of maps, globes, graphs, pictures, stories, diagrams, charts, and technology will highlight this course. In this rigorous course, students will begin to develop the reading, writing, and thinking skills necessary to succeed in high school AP courses. *1 credit*

#### **WORLD HISTORY**

World History studies the emergence and development of human civilizations. It will emphasize human interactions with the environment and the collaboration and conflict with other civilizations from 8000 BC to 1750 (first semester) and 1750 to the present (second semester). Students will study history and be exposed to its content in the context of 1) historical facts, 2) geography and culture, 3) technology and economic issues, and 4) government and citizenship. *1 credit*

#### **COLLEGE WORLD HISTORY**

**This course duals with high school World History.**

**HIST 2321- World Civilization I:** a survey of the political, religious, social, and intellectual development of world history prior to 1600. This course includes ancient and medieval history, the development of empires, the rise of religious and political struggles, and the social, economic, and political interactions between Europe, Africa, Asia, and the Americas. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

**HIST 2322- World Civilization II:** a survey of the political, religious, social, and intellectual development of world history from 1600 to the present. This course includes the study of the

Industrial Revolution, the Enlightenment, the rise of Colonial empires, the two World Wars, and the Cold War. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

### **UNITED STATES HISTORY**

U.S. History will provide an overview of the history of the United States from Reconstruction to the present day with an emphasis on the role of the U.S. in world, political and economic affairs. In particular, the course will look at the role of the U.S. government and how U.S. citizens have changed their beliefs and attitudes about the role of government and/or what is expected of the government in domestic and foreign affairs. The course integrates geography with history and political philosophy. Students will be exposed to the basics of information gathering and synthesis so that contributions may be made to preserving the historical record. *1 credit*

### **COLLEGE US HISTORY**

**This course duals with high school US History.**

**HIST 1301** – United States History I is a study of the American nation from English colonization to the close of Reconstruction. The course will focus on the development of American characteristics and nationality from early European exploration to the end of Reconstruction in 1877. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

**HIST 1302** – United States History II studies the American nation from 1877 to the present. The course will focus on the emergence of the United States as a world power, World War I, the twenties, the Great Depression, World War II, The Cold War, and the challenges of Modern America. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

### **US GOVERNMENT**

This semester's senior course takes an in-depth look at how the democratic process works. Students will be expected to comprehend, analyze, and evaluate the following areas: (1) Federalism-how the United States government is separated into the federal, state, county, and local levels; (2) the powers and limitations of the Legislative, Executive, and Judicial branches of government; and (3) individual right of the American citizen as expressed in the Bill of Rights and other amendments as well as their responsibilities as citizens. Students must give and document 12 hours of community service during the semester. *.5 credit*

### **ECONOMICS**

This semester's senior course introduces the principles and policies of economics. Students will analyze the interaction of supply and demand and study the role of financial institutions in a free enterprise system. Emphasis will be on personal finance and how to manage money. Students will write budgets, analyze insurance policies and contracts, and examine ways to save and invest for future needs and retirement. *.5 credit*

### **COLLEGE US GOVERNMENT**

**This course duals with high school Government.**

**GOVT 2305. American Government.** A functional study of the American Constitution and governmental system. The origins and developments of the American governmental system, federal, state, and interstate relations. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

### **COLLEGE ECONOMICS**

**This course duals with high school Economics.**

**ECON 2301. Macroeconomics.** An introductory course in principles and policies of economics as applied to money and banking, taxes, government debt, national income, gross national products, labor-management relations, social security, international economics, and economic changes in the modern world. *3 college hours credit; .5 high school credit; Students must meet TSI requirement; Tuition required*

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# MATHEMATICS

## ALGEBRA 1

This course studies algebraic reasoning and the use of variables in evaluation and manipulation problems. The primary emphasis is on functions and their relationships to equations and graphs. Much attention will be focused on linear and quadratic functions and equations, with some additional study of other nonlinear functions. Students will solve equations with one variable, systems of two equations with two variables, and quadratic equations. Many word problems with applications to the real world will be solved through modeling, graphing, and algebraic techniques. Graphing calculators will be used. *1 credit; TEA Pre-req: 8<sup>th</sup> Grade Math*

## HONORS ALGEBRA 1

This course includes the same concepts and skills covered in Algebra I and is designed for students with talent and inquisitiveness for studying mathematics. Students will be expected to have superior study habits and the ability to master basic skills readily so that more emphasis can be placed on applications and problem-solving. *1 credit; TEA Pre-req: 8<sup>th</sup> Grade Mathematics*

## GEOMETRY

The Geometry course is very Algebra intensive. This course investigates and uses relations, properties, and measurements of surfaces, lines, and angles in one, two, and three-dimensional figures. It is designed to develop deductive reasoning and emphasize problem-solving using informal proofs and definitions while integrating algebraic concepts. Topics will include introductory geometry; logical reasoning; algebraic approach to geometry; relationships among lines, planes, angles, and polygons; congruent and similar triangles; right triangles; quadrilaterals and their properties; circles; area; and solids. *1 credit; TEA Pre-req: Alg 1*

## HONORS GEOMETRY

This course includes the same concepts and skills covered in Geometry and is designed for students with talent and inquisitiveness for studying mathematics. Students will be expected to have superior study habits and the ability to master basic skills readily so that more emphasis can be placed on applications and problem-solving. *1 credit; TEA Pre-req: Alg 1*

## ALGEBRA 2

This course presents concepts for algebraic higher thinking skills. Topics include systems of equations/inequalities, applied geometric concepts, introduction to conic sections, quadratic functions, irrational numbers, exponents, logarithms, etc. *1 credit; TEA Pre-req: Alg 1*

## HONORS ALGEBRA 2

This course includes the same concepts and skills covered in Algebra 2 and is designed for students with talent and inquisitiveness for studying mathematics. Students will be expected to have superior study habits and the ability to master basic skills readily so that more emphasis can be placed on applications and problem-solving. *1 credit; TEA Pre-req: Alg 1*

## MATHEMATICAL MODELS WITH APPLICATIONS

This course studies math methods to model and/or solve real-life applied problems involving money, data, patterns, etc. *If a student selects this course as one of the four required math credits, it must be taken prior to Algebra 2; 1 credit; TEA Pre-req: Alg 1*

## ADVANCED QUANTITATIVE REASONING

Advanced Quantitative Reasoning is a capstone mathematics course that follows Algebra I, Geometry, and Algebra II. It builds on and extends what students have learned and covers other mathematics topics not typically taught in high school. The course does not remediate skills but reinforces needed skills as students study new topics in relevant, engaging contexts. The course also helps students develop college and career skills such as collaborating, conducting research, and making presentations. *1 credit; TEA Pre-reqs: Geom & Alg 2*

## **COLLEGE ALGEBRA & COLLEGE TRIGONOMETRY (PRECALCULUS)**

**MATH 1314 (College Algebra) & MATH 1316 (Plane Trigonometry).** This course for college-bound students combines a continuation, extension, and addition of Algebra II topics and plane trigonometry. It primarily studies functions-linear, quadratic, trigonometric, exponential, statistical, logarithmic, sine, cosine, tangent, secant, cosecant, and cotangent, and their related equations. Many word problems with applications to the real world will be solved through modeling, graphing, and algebraic techniques. It is good preparation for the ACT/SATs. *3 college hours credit per semester; 1 high school credit; Students must meet TSI requirement; Tuition required. TEA Pre-reqs: Alg 1, Geom, & Alg. 2*

## **COLLEGE/AP CALCULUS**

**MATH 2413 (Calculus I).** AP/College Calculus is a dual-credit class taught with the rigor of AP. It is equivalent to first semester College Calculus I with a full differential and integral calculus curriculum. Students who take an AP course in Calculus are expected to seek college credit, college placement, or both from institutions of higher learning. *4 college hours credit; 1 high school credit; Students must meet TSI requirement; Tuition required.*

## **COLLEGE PREP MATH**

This course is a college preparatory math course for seniors who have not tested college ready in mathematics. By successfully completing the college preparatory course, students may skip the developmental courses in this area and enroll directly in college-level courses at Ranger College. There is no charge for this course. This course can serve as the 4<sup>th</sup> math credit required for an endorsement for the foundation high school program. *1 credit*

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# **SCIENCE**

## **INTEGRATED PHYSICS AND CHEMISTRY (IPC)**

A lab-oriented course that develops skills in measurement, laboratory techniques and procedures, and development of process skills. Concepts studied include atomic structure, chemical reactions, physical and chemical properties, changes in matter, energy, forces, work, magnetism, electricity, sound, and light. Issues discussed include energy supply and demand, environmental concerns, and career opportunities. IPC is a preparatory course for Chemistry and Physics. *1 credit*

## **BIOLOGY**

Biology is a laboratory science course that covers the study of living things. Biology focuses on studying life by examining the five fundamental concepts of cellular biology, genetics, ecology, evolution, and physiology. The scientific process, laboratory skills, and biology's connections to other scientific disciplines are emphasized. *1 credit*

## **HONORS BIOLOGY**

This course includes the same concepts and skills covered in Biology and is designed for students with talent and inquisitiveness for science. Students will be expected to have superior study habits and the ability to master basic skills readily so that more emphasis can be placed on applications and problem-solving. *1 credit*

## **CHEMISTRY**

Students conduct field and laboratory investigations and make decisions using critical thinking and problem-solving. Topics include characteristics of matter, energy transformation, atomic structure, periodic table of elements, the behavior of gases, nuclear fusion and fission, oxidation-reduction reactions, acids and bases, and many more chemical ideas. Chemistry is like all sciences in that students must use their ability to solve problems using physical, mathematical, and conceptual problems. *1 credit; TEA Pre-reqs: 1 unit of high school science and Alg 1*

## **HONORS CHEMISTRY**

This course includes the same concepts and skills covered in Chemistry and is designed for students with talent and inquisitiveness for science. Students will be expected to have superior study habits

and the ability to master basic skills readily so that more emphasis can be placed on applications and problem-solving. *1 credit; TEA Pre-reqs: 1 unit of high school science and Alg I*

## **PHYSICS**

Students conduct laboratory investigations using the scientific method and make informed decisions through problem-solving and critical thinking. Topics studied include motion and forces, gravity, electrical, magnetic, and nuclear forces, momentum and energy, waves, and quantum physics. This course provides students with a conceptual framework, factual knowledge, and analytical skills. *1 credit*

## **ANATOMY & PHYSIOLOGY**

Anatomy and Physiology investigates the structures and functions of the components of the human body, focusing on the specialization of cells, how cells function cooperatively as tissue and organs, and the interrelationships of systems that result in a living organism. The course includes anatomical structures and regulating mechanisms that influence how systems function. This course is highly recommended for students going into the medical and health fields. Anatomy is also essential to coaching, athletic training, health, and medicine. *1 credit; TEA pre-reqs: Biology and a second science credit.*

## **COLLEGE ANATOMY & PHYSIOLOGY**

**This course duals with high school anatomy.**

**BIOL2401 & BIOL 2402.** Anatomy and Physiology investigates the structures and functions of the components of the human body, focusing on the specialization of cells, how cells function cooperatively as tissue and organs, and the interrelationships of systems that result in a living organism. The course includes anatomical structures and regulating mechanisms that influence how systems function. This course is highly recommended for students going into the medical and health fields. Anatomy is also essential to coaching, athletic training, health, and medicine. *4 college hours credit per semester; 1 high school credit; Students must meet TSI requirement; Tuition required. TEA pre-reqs: Biology and a second science credit.*

## **COLLEGE BIOLOGY for SCIENCE MAJORS**

**This course duals with high school Scientific Research and Design.**

**BIOL1406 & BIOL 1407.** Scientific Research and Design is a broad-based course designed to allow districts and schools considerable flexibility to develop local curriculum to supplement any program of study or coherent sequence. The course has the components of any rigorous scientific or engineering program of study, from problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. These components are integrated with the career and technical education emphasis of helping students gain entry-level employment in high-skill, high-wage jobs and/or continue their education. Students must meet the 40% laboratory and fieldwork requirement. *4 college hours credit per semester; 1 high school credit; Students must meet TSI requirement; Tuition required. TEA pre-reqs: Biology, Chemistry, Integrated Physics, Chemistry (IPC), or Physics.*

## **ASTRONOMY**

In Astronomy, students conduct laboratory and field investigations, use scientific methods, and make informed decisions using critical thinking and scientific problem-solving. Students study the following topics: astronomy in civilization, patterns and objects in the sky, our place in space, the moon, reasons for the seasons, planets, the sun, stars, galaxies, cosmology, and space exploration. Students who successfully complete Astronomy will acquire knowledge within a conceptual framework, conduct observations of the sky, work collaboratively, and develop critical-thinking skills. *1 credit*

## **ENVIRONMENTAL SYSTEMS**

In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem-solving. Students study a variety of topics that include: biotic and abiotic factors in habitats, ecosystems, and biomes, interrelationships among resources and an environmental system, sources and flow of energy through an environmental system, the relationship between carrying capacity and changes in populations and ecosystems, and changes in environments. *1 credit*

## **FORENSIC SCIENCE**

Forensic Science is a course that introduces students to the application of science to connect a violation of law to a specific criminal, criminal act, or behavior and victim. Students will learn terminology

and procedures related to searching and examining physical evidence in criminal cases as they are performed in a typical crime laboratory. Using scientific methods, students will collect and analyze evidence such as fingerprints, bodily fluids, hairs, fibers, paint, glass, and cartridge cases. Students will also learn the history and the legal aspects as they relate to each discipline of forensic science and understand that scientific methods of investigation can be experimental, descriptive, or comparative. *1 credit TEA pre-reqs: Biology and Chemistry*

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## PHYSICAL EDUCATION & ATHLETICS

### PHYSICAL EDUCATION (PE)

**PE 1- Foundations of Personal Fitness**

**PE 2- Individual or Team Sports**

**PE 3- Adventure/Outdoor Education**

**PE 4- Aerobic Activities**

These courses are designed to provide an in-depth interest in lifetime sports and help understand the value of various activities in developing and maintaining physical fitness.

*1 credit each*

### ATHLETICS

**Boys Athletics 1, 2, 3, and 4**

**Girls Athletics 1, 2, 3, and 4**

Athletics (competitive sports) allows students to enjoy the pursuits of excellence and seek opportunities to test themselves against their accomplishments and those of their peers. In athletics, students will represent the school and compete as a team against other schools. Students will be required to attend before-school and/or after-school practices. *1 credit each*

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## FINE ARTS

### ONE ACT PLAY (ART & MEDIA COMMUNICATIONS)

The fine arts develop cognitive functioning and increase student academic achievement, higher-order thinking, communication, and collaboration skills, making the fine arts applicable to college readiness, career opportunities, workplace environments, social skills, and everyday life. UIL One Act Play rules and regulations will also be covered. *1 credit each*

### ART 1, 2, 3, & 4

In these courses, the students will study the foundations of art, including the elements and principles of art. They will use creative expression to communicate ideas through projects using various media, including drawing, painting, printmaking, sculpture, and digital art. Students will explore art history, culture, and career opportunities and learn how to analyze and evaluate artworks of themselves and others. *1 credit each; The TEA pre-req for each course is the preceding course.*

### BAND 1, 2, 3 & 4

A performance-based instrumental course that includes the common TEKS for music follows the four basic strands for music perception, creative expression/performance, historical and cultural heritage, and critical evaluation. In addition, students will be allowed individual and small group study and multiple leadership and collaborative learning opportunities. *1 credit each; The TEA pre-req for each course is the preceding course.*

### APPLIED MUSIC 1, 2, 3, & 4

A performance-based instrumental music course that includes the common TEKS for music (perception, creative expression/performance, and response/evaluation). Students will be given the opportunity for individual and small-group instruction. Students will learn, study, and practice music performance basics by practicing and improving skills on their musical instrument; learning and practicing music theory; learning and practicing reading and writing music; and researching and studying various music topics. *1 credit each; The TEA pre-req for each course is the preceding course.*

#### **COLLEGE ART APPRECIATION**

**ARTS 1301** -This online course is offered through Ranger College. *3 college hours credit; .5 high school credit; Tuition required*

#### **COLLEGE MUSIC APPRECIATION**

**MUSI 1306** -This online course is offered through Ranger College. *3 college hours credit; .5 high school credit; Tuition required*

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## **LANGUAGES OTHER THAN ENGLISH**

### **SPANISH 1**

This course is designed to be an introduction to both the Spanish language and culture. Students will learn to respond to various basic Spanish commands and phrases during this course. They will be introduced to the basic vocabulary essential to the language, such as counting, telling time, the months, the days of the week, etc. As the course progresses, students will learn to construct basic Spanish phrases and sentences while learning to conjugate the most common verbs in the present tense. Proper grammar, spelling, and pronunciation will always be stressed. New vocabulary will be learned continually. *1 credit*

### **SPANISH 2**

This course is designed to increase the student's understanding and skill of the Spanish language and culture, building upon the concepts mastered in the introductory course. Greater emphasis is placed on pronunciation and speaking, while new grammar and vocabulary are continually introduced. The course tends to be much more intense and demanding than Spanish 1, and students should expect to spend more time studying concepts and vocabulary. *1 credit; TEA Pre-req: Span 1*

### **SPANISH 3 & SPANISH 4**

These courses are a continuation of Spanish I and II of oral and written communication skills in the language and continued learning about past and present Hispanic cultures. The emphasis is on oral communication. *1 credit each; The TEA Pre-req is the previous level of the course.*

### **AMERICAN SIGN LANGUAGE (ASL) 1 - Special approval must be obtained**

ASL 1 is an introduction to American Sign Language (ASL) and includes basic grammar, vocabulary, fingerspelling, numbers, and cultural information about the deaf community. *1 credit*

### **AMERICAN SIGN LANGUAGE (ASL) 2 - Special approval must be obtained**

ASL 2 continues ASL 1 and expands vocabulary, grammatical knowledge, and cultural awareness. ASL 2 introduces increasingly complex grammatical aspects. *1 credit; TEA Pre-req: ASL 1*

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# CAREER AND TECHNOLOGY COURSES

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## AGRICULTURE

### PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES

This course allows students to develop knowledge and skills in agriculture by exploring various career opportunities, developing leadership potential, and researching and evaluating animals and natural resources. *1 credit*

### INTRODUCTION TO WELDING

Introduction to Welding will introduce welding technology emphasizing basic welding laboratory principles and operating procedures. Students will be introduced to the three basic welding processes. Topics include industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. *1 credit*

### \*COLLEGE - WELDING I

**This course duals with high school Welding 1.**

**WLDG 1421 & WLDG 1428.** Welding I provide the knowledge, skills, and technologies required for employment in metal technology systems. Students will develop knowledge and skills related to this system and apply them to personal career development. This course supports the integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to various settings and problems. Knowledge about career opportunities, requirements, expectations, and the development of workplace skills prepares students for future success. *4 college hours credit per semester; 1 high school credits per semester; 1 period; Tuition required. TEA Recommended Pre-reqs: Alg 1, Intro to Welding*

### \*COLLEGE - WELDING II

**This course duals with high school Welding 2.**

**WLDG 1412 & WLDG 1413.** Welding II builds on the knowledge and skills developed in Welding I. Students will develop advanced welding concepts and skills related to personal and career development. Students will integrate academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to various settings and problems. *4 college hours credit per semester; 1 high school credits per semester; 2 periods; Tuition required. TEA Pre-reqs: Welding 1*

*\*Students may be eligible to receive a Welding Certificate of Completion- Level 1 from Ranger College after successfully completing two years of college welding in high school.*

### CONSTRUCTION MANAGEMENT I

This exploratory course is designed to familiarize and teach the students everything with basic theory and specialized skills in construction management. Skill areas include tool identification and safe use, carpentry, electricity, plumbing, woodworking skills, masonry, and the process you have to go through to get a building permit. *2 credits; 1 period*

### FLORAL DESIGN

Floral Design is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Students will develop respect for the traditions and contributions of diverse cultures by analyzing artistic floral styles and historical periods. Students will respond to and analyze floral designs, thus developing lifelong skills to make informed judgments and evaluations. Note: *This course satisfies a fine arts credit requirement. 1 credit; 1 period*

### EQUINE SCIENCE

This course is designed to develop knowledge and skills about horses, donkeys, and mules' nutrition, reproduction, health, and management. Students will identify breeds, colors, and markings of each species, evaluate conformation and performance, analyze internal and external anatomies, and review basic grooming and health practices. *One semester course paired with Small Animal Management .5 credit*

### **SMALL ANIMAL MANAGEMENT**

This course helps prepare students for careers in animal science. Students will acquire and enhance academic knowledge and skills related to animal systems and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. Students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in various settings to prepare for success. Suggested small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avians, dogs, and cats. *One semester course paired with Equine Science .5 credit*

### **LIVESTOCK PRODUCTION**

Students will acquire knowledge and skills related to animal systems and the workplace; investigate career opportunities, entry requirements, and industry expectations. Animal species to be addressed in this course include beef cattle, dairy cattle, swine, sheep, goats, and poultry. *1 credit*

### **ADVANCED ANIMAL SCIENCE**

Students attain academic skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for applying scientific and technological aspects of animal science through field and laboratory experiences. *1 credit; TEA pre-reqs: Biology and Chemistry or IPC; Algebra I and Geometry; and either Small Animal Management, Equine, or Livestock Prod. This course satisfies a high school science graduation requirement but is not factored in student GPA/rank.*

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## **AUTOMOTIVE TECHNOLOGY**

### **AUTO TECH 1 or SMALL ENGINE TECHNOLOGY**

Small Engine Technology I includes knowledge of the function and maintenance of the systems and components of all types of small engines, such as outdoor power equipment, motorcycles, generators, and irrigation engines. This course is designed to provide training for employment in the small engine technology industry. Instruction includes the repair and service of cooling, air, fuel, lubricating, electrical, ignition, and mechanical systems. In addition, the student will receive instruction in safety, academic, and leadership skills, as well as career opportunities. *1 credit; 1 period*

### **AUTO TECH 2 or AUTOMOTIVE BASICS**

Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system, and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to various interesting and relevant activities, problems, and settings. This course focuses on teaching safety, tool identification, proper tool use, and employability. *1 credit; 1 period*

### **COLLISION REPAIR**

Collision Repair includes knowledge of the processes, technologies, and materials used in the reconstruction of vehicles. This course is designed to teach the concepts and theory of systems related to automotive collision repair and refinishing. *2 credits; 2 periods*

### **PAINT & REFINISHING**

Paint and Refinishing includes knowledge of the processes, technologies, and materials used in the reconstruction of vehicles. This course is designed to teach the concepts and theory of systems related to automotive paint and refinishing. *2 credits; 2 periods*

Students enrolled in the auto tech program will have the opportunity to participate in skills and leadership events and compete in contest areas in Skills USA Texas.

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## **CAREER PREPARATION/WORK PROGRAM**

**CAREER PREP I- 2 credits**

**--OR--**

**CAREER PREPARATION I/EXTENDED CAREER PREP-** 3 credits; TEA pre-req: Successful completion of one or more advanced CTE courses that are part of a coherent sequence of courses in a career cluster related to the field in which the student will be employed.

**CAREER PREP II- 2 credits; TEA pre-req: Career Preparation I**

**--OR--**

**CAREER PREPARATION II/EXTENDED CAREER PREP-**3 credits; TEA pre-req: Successful completion of one or more advanced CTE courses that are part of a coherent sequence of courses in a career cluster related to the field in which the student will be employed.

Career preparation courses provide opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences. The goal is to prepare students with various skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. The career prep program is for juniors and seniors.

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## **FAMILY & COMMUNITY SERVICES**

### **PRINCIPLES OF HUMAN SERVICES**

Principles of Human Services is a laboratory course that will enable students to investigate careers in the Human Services Career Cluster, including counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers. *1 credit*

### **CHILD DEVELOPMENT**

Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote children's well-being and healthy development and investigate careers related to the care and education of children. *1 credit*

### **INSTRUCTIONAL PRACTICES**

Instructional Practices is a field-based (practicum) internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel. *2 credits; 2 periods TEA pre-req: One credit from Education and Training Career Cluster*

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## HEALTH SCIENCE

### PRINCIPLES OF HEALTH SCIENCE

Students will be provided with a foundation of knowledge and skills in health science with an introduction to career possibilities in Health Care. Principles of Health Science includes an overview of anatomy and physiology, diseases, disorders, health and wellness, and various systems of the healthcare industry. Students will learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others. *1 credit*

### MEDICAL TERMINOLOGY

Medical Terminology is a course that helps familiarize students with the words and terms used in today's healthcare industry. This course introduces students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, singular and plural forms, and medical abbreviations and acronyms. Emphasis is placed on the prevention and treatment of disease. The student is expected to demonstrate communication skills using the terminology applicable to the health science industry. Prerequisite Principles of Health Science (unless with prior approval) *1 credit*

### HEALTH SCIENCE THEORY/HEALTH SCIENCE CLINICAL

This course includes learning patient care skills such as first aid, vital signs, CPR/AED, range of motion, and activities of daily living, as well as the subjects of safety, team building, problem-solving, and ethical and legal responsibilities. Practicum experiences can occur in various locations appropriate to the nature and level of experience for career preparation and learning. The Health Science course is designed to develop advanced knowledge and skills related to various health careers. Students will have hands-on and observation experiences for continued knowledge and skill development. This course has additional requirements, including a complete application process, background check, drug check, TB test/Flu/COVID vaccine to meet policy requirements by medical facilities and comply with Comanche ISD, CCMC, WH, and other approved medical facility dress code requirements. Professional attire and appearance standards are required. Transportation, private insurance, and uniforms may be required. Application process required prior to enrollment in this class. *2 credits; 2 periods; TEA pre-req: Biology; Local pre-req: Principles of Health Science and Med Term*

### PRACTICUM IN HEALTH SCIENCE

The practicum is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in various locations appropriate to the nature and level of experience. Professional integrity in the healthcare industry depends on accepting ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibility and limitations and understand the implications of their actions. This course has additional requirements, including a complete application process, background check, drug check, TB test/Flu/COVID vaccine to meet policy requirements by medical facilities and comply with Comanche ISD, CCMC, WH, and other approved medical facility dress codes meeting professional attire and appearance standards. Comply with Comanche ISD, CCMC, WH, and other approved medical facility dress codes. Professional attire and appearance standards are required. Transportation, private insurance, and uniforms may be required. Application process required prior to enrollment in this class. Certification examinations opportunity after completion of ALL 4 classes offered in this career pathway. *2 credits; 2 periods; TEA pre-req: Health Sci Theory/Clinical*

### EMT-BASIC

Course offered online as a dual credit with Ranger College, please see <https://www.rangercollege.edu/emt-dual-credit/> for more information regarding requirements and tuition costs.

Students enrolled in the health science program will have the opportunity to participate in skills and leadership events and compete in contest areas in Skills USA Texas.

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## **INFORMATION TECHNOLOGY**

### **PRINCIPLES OF INFORMATION TECHNOLOGY**

Students develop computer literacy skills to adapt to emerging technologies in the global marketplace. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. *1 credit; 1 semester; (Students will take Professional Communications (Speech) for one semester and Principles of Information Technology the opposite semester)*

### **PROFESSIONAL COMMUNICATIONS (SPEECH)**

This course is designed to enhance the communication skills of students. These skills are fundamental to all other learning and to all levels of human interaction, especially for the future in the workforce. Students will understand concepts and processes involved in sending and receiving oral messages, evaluating and using nonverbal communication, appropriate communication for the workplace, and listening for various purposes. Students will participate in discussions, cooperative groups, skits, and other activities designed to enhance their communication skills.  
*.5 credit (Students will take Professional Communications (Speech) for one semester and Principles of Information Technology the opposite semester)*

### **BUSINESS MANAGEMENT**

Business Management is designed to familiarize students with the concepts related to business management as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills. *1 credit*

### **DIGITAL MEDIA**

By studying digital media and its application in information technology, students will analyze and assess current and emerging technologies while designing and creating multimedia projects that address customer needs and resolve problems. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. *1 credit*

### **GRAPHIC DESIGN & ILLUSTRATION I: 1 credit**

### **GRAPHIC DESIGN & ILLUSTRATION II w/lab: 2 credits, 1 period; TEA Pre-req: Graphic Design & Illustration I**

Students will be given multiple opportunities to observe, learn, and apply the creative design process to create original two- or three-dimensional projects as well as how to apply printing concepts. In addition to developing the knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to understand the industry with a focus on fundamental elements and principles of visual art and design.

### **COMPUTER SCIENCE I:**

Computer Science I will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations, systems, and concepts. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving and decision-making; digital citizenship; and technology

operations and concepts. *1 credit; TEA pre-req: Algebra I; credit can count as Language other than English credit.*

### **COMPUTER SCIENCE A:**

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. *2 credits; TEA recommended pre-req: Algebra I; 1st semester credit will count and calculate into student's GPA/rank as a one high school math credit; 2nd semester will count as Language other than English (LOTE) credit.*

### **COMPUTER SCIENCE PRINCIPLES:**

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. *1 credit; TEA recommended pre-req: Algebra I; credit can count as Language other than English credit.*

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## **JOURNALISM**

### **JOURNALISM**

Students enrolled in Journalism write in a variety of forms for a variety of audiences and purposes. High school students enrolled in this course are expected to plan, draft, and complete written compositions on a regular basis, carefully examining their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. In Journalism, students are expected to write in a variety of forms and for a variety of audiences and purposes. Students will become analytical consumers of media and technology to enhance their communication skills. Published work of professional journalists, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students enrolled in Journalism will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principles of publishing. *1 credit; 1 period*

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## **ROBOTICS**

### **ROBOTICS I**

In Robotics I, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. *1 credit; 1 period*

### **ROBOTICS II**

In Robotics II, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs. *1 credit; 1 period; TEA pre-req: Robotics I*

Students enrolled in the Robotics program will have the opportunity to participate in skills and leadership events and compete in contest areas in Skills USA Texas.

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