

# **North Zulch ISD Curriculum Guide 2025-2026**



**“Learners Today,  
Leaders Tomorrow”**

North Zulch ISD is committed to developing character, fostering a positive learning experience and promoting individual student success in society through a shared responsibility between students, teachers, parents, and community.

## **North Zulch ISD Curriculum Resources**

Curriculum (what we teach) and instruction (how we teach) is at the core of the North Zulch ISD schools. The Curriculum and Instruction Department focuses on developing dynamic curriculum PreK-12, based directly on the Texas Essential Knowledge and Skills (TEKS). North Zulch ISD is a TEKS-first school district. Our teachers use a variety of instructional resources such as teacher-created lessons, project-based activities, textbooks, online resources, and ancillary materials to ensure mastery of the TEKS.



<http://tea.texas.gov/curriculum/teks/>



[Lead4ward.com](http://lead4ward.com)

Lead4ward provides comprehensive documents:

- Common language, structure, and process
- Clarified and specified TEKS and STAAR expectations

### **Math Curriculum**

**The foundation of the Mathematics curriculum is to provide opportunities for students to learn mathematical concepts at the conceptual level using a hands-on approach to teaching. Then, transitioning to the abstract level in order to provide all students with opportunities to learn important mathematical concepts while empowering students to become confident, resourceful and persistent problem solvers.**

**Fundamental Principles:**

- **Math classrooms have a learning environment that are challenging and supportive.**
- **Math concepts are connected using multiple representations, which develop an understanding and the ability to solve problems.**
- **Learned concepts are demonstrated and communicated daily both orally and in writing.**

## K-5 Math

<http://acceleratelearning.com>

- Curriculum created by teachers
- Digital and Print components
- 5E+IA learning model (Engage, Explore, Explain, Elaborate, Evaluate, Intervention, and Acceleration)



## 6-8 Math - McGraw-Hill

<https://connected.mcgraw-hill.com/connected/>

The McGraw-Hill program provides an interactive text that engages students and assists with learning and organization. It personalizes the learning experience for each student by accommodating multiple learning styles where students are prompted to explain their thoughts and processes for solving math problems.



## 9-12 Math- All Things Algebra

<https://allthingsalgebra.com/>

All Things Algebra® curriculum resources are rigorous, engaging, and provide both support and challenge for learners at all levels.

## MATHEMATICS COURSES

### **Algebra 1 (1 credit):**

Students will master foundation concepts for high school mathematics. Students will continue to build on this foundation as they expand their understanding through mathematical experiences including: algebraic thinking and symbolic reasoning, function concepts, relationship between equations and functions, tools for algebraic thinking, and underlying mathematical processes.

### **Algebra 1-Honors (1 credit):**

In addition to the topics covered in Algebra I, a strong emphasis will be placed on a student using algebraic thinking and mathematical processes. The level of instruction/ curriculum will focus on preparing the student for Dual Credit courses.

### **Geometry (1 credit):**

Student will master foundation concepts for high school mathematics. Students will continue to build on this foundation as they expand their understanding through mathematical experiences including: geometric thinking and spatial reasoning, geometric figures and their properties, the relationship between geometry other mathematics and disciplines, tools for geometric thinking and underlying processes.

### **Geometry-Honors (1 credit):**

In addition to the topics covered in Geometry, a strong emphasis is placed on a student using deductive reasoning. The level of instruction/ curriculum will focus on preparing the student for Dual Credit courses.

### **Algebra II (1 credit):**

Students will master foundation concepts for high school mathematics. Students will continue to build on this foundation as they expand their understanding through mathematical experiences including: algebraic thinking and symbolic reasoning, function concepts, relationship between equations and functions, tools for algebraic thinking, and underlying mathematical processes.

**Algebra II-Honors (1 credit):**

Algebra II Honors provides an in-depth treatment of algebraic concepts through the study of functions using a transformational approach. The level of instruction/curriculum will focus on preparing the student for Dual Credit courses.

**Pre-Calculus (1 credit):**

Students use symbolic reasoning and analytical methods to represent mathematical situations, to express generalizations, and to study mathematical concepts and the relationships among them. Students use functions, equations, and limits as useful tools for expressing generalizations and as means for analyzing and understanding a broad variety of mathematical relationships. Students also use functions as well as symbolic reasoning to represent and connect ideas in geometry, probability, statistics, trigonometry, and calculus and to model physical situations. Students use a variety of representations (concrete, pictorial, numerical, symbolic, graphical, and verbal), tools, and technology (including, but not limited to, calculators with graphing capabilities, data collection devices, and computers) to model functions and equations and solve real-life problems.

**Financial Mathematics (1 credit):**

Financial Mathematics is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors.

**Mathematical Models with Applications (1 credit):**

Mathematical Models with Applications is designed to build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. This mathematics course provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions. Students will select from tools such as physical objects; manipulatives; technology, including graphing calculators, data collection devices, and computers; and paper and pencil and from methods such as algebraic techniques, geometric reasoning, patterns, and mental math to solve problems.

**Algebraic Reasoning (1 credit):**

In Algebraic Reasoning, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I, continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses.

**Algebra I RTI (local credit):**

Algebra I RTI provides intensive instruction for students who did not meet standard on EOC Algebra I. This course is intended to create strategic mathematical learners from underprepared mathematics students. The basic understandings will stimulate students to think about their approach to mathematical learning. These basic understandings will include identifying errors in the teaching and learning process, input errors, physiological concerns and key cognitive skills. Use of personal data and statistical analysis will establish relevance and aid in creation of personalized learning goals.

**College Preparatory Mathematics (1 credit):**

The College Preparatory Mathematics Course (CPMC) is a full credit course designed for students in Grade 12 whose performance on an end-of course assessment instrument or coursework, a college entrance examination, or a Texas Success Initiative assessment instrument, indicate the student is not ready to perform entry-level college coursework.

## **Reading Language Arts (RLA) Curriculum**

**The Reading Language Arts curriculum is a combination of language experiences, including daily opportunities for independent reading and writing. We believe that students should receive small-group and individual instruction at their instructional reading and writing level in addition to whole-group instruction at their grade level. The Reading Language Arts curriculum and instruction provides all students with the foundation necessary to succeed in all academic areas through a balanced, integrated approach to literacy. Reading, writing, speaking, listening, and inquiry skills, and the strategies that support them, directly contribute to student success in a rapidly changing world.**

**Fundamental Principles:**

- **Reading, writing, and the conventions of language are taught together not in isolation.**
- **Students learn phonics best when instruction is embedded in a wide range of engaging literacy experiences.**
- **Students have choice in independent reading.**
- **Students experience authentic reading, writing, listening, and speaking opportunities within multiple genres including visual texts.**
- **Various reading and writing assignments guide instruction so that rigor and expectations increase over time.**
- **Inquiry based learning contributes to the development of reading, writing and thinking skills.**
- **Students benefit from direct vocabulary instruction.**

# **K-12 Reading Language Arts**

## **K-5 Reading Language Arts**

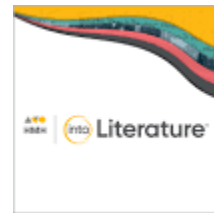
<https://www.hmhco.com/programs/into-reading>



Houghton Mifflin Harcourt, *Into Reading* utilizes meaningful data, authentic and high-interest texts, and a flexible design while emphasizing the importance of small-group time. *HMH's Into Reading* integrates the teaching of reading, writing, listening, speaking, language development, and phonics and word study.

## **6-8 Reading Language Arts**

<https://www.hmhco.com/programs/into-literature>



Houghton Mifflin Harcourt, *Into Literature* is an English Language Arts and Literature program for advancing literacy and language skills for success in college, work, and life. With engaging, exemplary texts for building intellectual stamina and tenacity, *HMH's Into Literature* is an ideal curriculum for developing analytical readers, independent thinkers, and proficient writers. A full range of embedded assessments, reporting, analytics, and grade-level measures offer just-in-time evaluation of student growth as well as year-long progress.

## **English I, II, III, IV**

<https://www.commonlit.org/en>

CommonLit is a comprehensive literacy program with thousands of reading lessons that provide tailored instruction to students' needs with text-to-speech, translation, and digital note-taking. CommonLit tracks students' reading performance, sets goals, and recommends instructional next steps.

## **READING LANGUAGE ARTS COURSES**

### **English I (1 credit):**

In English I, students master previously learned skills. They plan, draft, and complete written compositions on a regular basis. Editing their papers for clarity and the correct use of the conventions and mechanics of written English, students produce final, error-free drafts. They write to persuade, to report, and to describe. Students read and study stories, dramas, novels, and poetry. They learn literary forms and terms associated with selections being read and interpret the possible influences of the historical context on a literary work.

**English I-Honors (1 credit):**

The English I Honors student will increase and refine critical reading and writing skills. The student will communicate effectively through exposition, analysis, and argumentation to achieve sufficient richness and complexity for effective communication. Through the exposure and experience of different genres, the student will interpret a work's structure, style, theme, symbolism, imagery and tone to develop stylistic maturity while observing textural detail necessary to prepare for the next grade level.

**English II (1 credit):**

In English II, students master previously learned skills. They plan, draft, and complete written compositions on a regular basis, focusing on persuasive essays. Editing their papers for clarity and the correct use of the conventions and mechanics of written English, students produce final, error-free drafts. They practice various forms of writing including literary responses, reflective essays, and autobiographical narratives. Students read and study selected stories, dramas, novels, and poetry. They learn literary forms and terms associated with selections being read and interpret the possible influences of the historical context on a literary work.

**English II-Honors (1 credit):**

English II Honors students continue to increase and refine reading, writing, and evaluative skills in a fast-paced, challenging academic environment. Students will read literary texts written in a variety of periods, disciplines, rhetorical contexts, and literary genres. They will analyze these texts for structure and literary elements including style, theme, figurative language, imagery, symbolism, and tone. Additionally, students will consider a work's literary merits as well as the social and historical context reflected in the text. Writing assignments will focus on the critical analysis of literature and include expository, analytical, argumentative, and persuasive essays.

**English III (1 credit):**

In English III, students master previously learned skills. They plan, draft, and complete written compositions on a regular basis. Editing their papers for clarity and the correct use of the conventions and mechanics of written English, students produce final, error free drafts. An emphasis is placed on business forms of writing such as the report, the business memo, the narrative of a procedure, the summary or abstract, and the resume. Students read extensively in multiple genres from American literature. They learn literary forms and terms associated with selections being read and interpret the possible influences of the historical context on a literary work.

**English IV (1 credit):**

In English IV, students master previously learned skills. They plan, draft, and complete written compositions on a regular basis. Editing their papers for clarity and the correct use of the conventions and mechanics of written English, students produce final, error free drafts. They write in a variety of forms including business, personal, literary, and persuasive texts. Students read extensively in multiple genres from British literature and other world literature. They learn literary forms and terms associated with selections being read and interpret the possible influences of the historical context on a literary work.

**English I RTI (local credit):**

English I RTI provides an intensive study of composition for students who did not meet standard on EOC English I. Students will plan, draft, and complete written compositions on a regular basis as well as short answer essays.

**English II RTI (local credit):**

English II RTI provides an intensive study of composition for students who did not meet standard on EOC English II. Students will plan, draft, and complete written compositions on a regular basis as well as short answer essays.

**College Preparatory English (1 credit):**

The College Preparatory English Course (CPMC) is a full credit course designed for students in Grade 12 whose performance on an end-of course assessment instrument or coursework, a college entrance examination, or a Texas Success Initiative assessment instrument, indicate the student is not ready to perform entry-level college coursework.

**ENGLISH 1301- Freshman Composition I-Fall Semester (Dual Credit)****ENGLISH 1302-Freshman Composition II-Spring Semester (Dual Credit)**

*Prerequisite(s):* Acceptable TSIA scores or the ability to exempt TSI; Junior or Senior standing & teacher approval

Students enrolled in the college course will receive dual credit. The course will focus on developing core skills in reading, critical thinking, writing, and speaking. It emphasizes the writing process and includes standard language conventions. Prose analysis techniques commonly needed for college courses and career responsibilities are presented. Upon successful completion of this semester/year long course, the student will earn three (3)/(6)hours of college English credit, as well as his or her high school junior or senior English credit.

*Fee:* see counselor for details

## **LANGUAGES OTHER THAN ENGLISH**

**Spanish I (1 credit):**

Introduce basic conversational skills. Cultural aspects of Hispanic countries are explored.

**Spanish II (1 credit):**

Expansion of Spanish 1 skills with emphasis on the grammatical structures of the language and frequent use of the spoken language is encouraged. Study of the Hispanic culture is continued.

**COMPUTER SCIENCE I (1 credit):**

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.



**COMPUTER SCIENCE II (1 credit):**

Computer Science II 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 computer science through the study of technology operations, systems, and concepts.

## **Science Curriculum**

**The Science curriculum and instruction provides all students an authentic understanding of scientific knowledge and processes, and teaches students to be critical thinkers. The science curriculum drives instruction where learning is achieved using inquiry, the acquisition of content, experimentation, reflection, and the use of current technology. This type of learning is vital so that students will be able to apply what they know to new situations, enabling them to make informed decisions in the future.**

**Fundamental Principles:**

- **Inquiry based learning is taught through hands on investigations in the classroom and in the lab.**
- **Learning is applied across the disciplines and beyond the classroom.**
- **Vocabulary is taught in context, utilizing multiple representations.**
- **Laboratory safety is modeled and practiced in investigations.**
- **Teachers and students use current technology for teaching and learning.**

**K-5 Science**

<http://acceleratelearning.com>

- Curriculum created by teachers in conjunction with Rice University
- 100% digital and constantly updated
- Hands-on investigations
- 5-E Lesson Model
- Intervention & Acceleration resources



## 6-12 Science

<https://www.summitk12.com/>



Summit K12's online programs for whole class and small group instruction as well as to provide targeted, individualized review and practice. Whether students are struggling to master concepts or are accelerated learners, Summit K12 allows for differentiated instruction easily, enabling all learners to work at their own pace and meet learning standards, regardless of their skill level or learning style.

### **SCIENCE COURSES**

#### **Integrated Physics and Chemistry (1 credit):**

Students conduct laboratory and field investigations, use scientific methods during investigation, and make informed decisions using critical thinking and scientific problem solving. This course integrates the disciplines of physics and chemistry in the following topics: force, motion, energy, and matter.

#### **Biology (1 credit):**

Students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biology study a variety of topics that include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; and ecosystems and the environment.

#### **Biology-Honors (1 credit):**

This study includes topics similar to those covered in the Biology course; however, the topics are more thoroughly investigated. A greater amount of material is covered, and topics are explored in greater depth.

#### **Chemistry (1 credit):**

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 characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our daily lives.

#### **Chemistry-Honors (1 credit):**

This study includes the same topics covered in Chemistry, but with more complex mathematical problems. Also included are some additional concepts more abstract than those covered in the academic level. The level of instruction/curriculum will focus on preparing the student for additional college level science courses.

#### **Physics (1 credit):**

This applied physics course is designed to provide a study in force, work, rate, resistance, energy, power, and force transformers as applied to mechanical, fluid, thermal, and electrical energy that comprise simple and technological devices and equipment. The course also reinforces the mathematics applications a student needs to understand to apply the principles being studied.

**Biology RTI (local credit):**

The goal of the course is to stimulate students to think critically about our Biology. The course will develop the skills of students who did not meet standard on EOC Biology.

**Forensic Science (1 credit):**

Students are introduced 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 the search and examination of 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.

**Anatomy and Physiology (1 credit):**

The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

**Advanced Plant and Soil Science (1 credit):**

Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science.

**Advanced Animal Science (1 credit):**

Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

# **Social Studies Curriculum**

The Social Studies curriculum and instruction provides students the knowledge and skills necessary to become life-long learners and informed and responsible citizens about the United States and the World. This is accomplished through the teaching of broad concepts, social studies skills, and learning strategies.

## **Fundamental Principles:**

- Social Studies content instruction focuses on broad concepts, connections, changes over time, and cause and effect.
- Social Studies skills instruction focuses on writing; interactive-note booking skills; analysis of visual documents, primary sources, maps and graphics, and reading in the content area.
- Social Studies instruction actively engages students in the learning process.
- Social Studies curriculum, skills and vocabulary are most effective when vertically aligned K-12.
- ELAR and Social Studies instruction in elementary are integrated whenever possible

## **K-5<sup>th</sup> Studies Weekly Social Studies**

<https://www.studiesweekly.com/>



Studies Weekly provides a core Social Studies curriculum organized thematically to the strands of civics and government, geography, economics, and history; all within a student-friendly periodical format and robust online learning platform. Studies Weekly includes learning experiences that are:

- Hands-on and Interactive
- Spiraled and Scaffolded
- Integrated with RLA (Reading Language Arts)
- Standards-aligned
- Research-based

## **6-12 Lowman Education**

<https://lowmaneducation.com/>



## **SOCIAL STUDIES COURSES**

### **World Geography (1 credit):**

In World Geography Studies, students examine people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present with emphasis on contemporary issues. A significant portion of the course centers around the physical processes that shape patterns in the physical environment; the characteristics of major landforms, climates, and ecosystems and their interrelationships; the political, economic, and social processes that shape cultural patterns of regions; types and patterns of settlement; the distribution and movement of the world population; relationships among people, places, and environments; and the concept of region. Students analyze how location affects economic activities in different economic systems. Students identify the processes that influence political divisions of the planet and analyze how different points of view affect the development of public policies. Students compare how components of culture shape the characteristics of regions and analyze the impact of technology and human modifications on the physical environment. Students use problem-solving and decision-making skills to ask and answer geographic questions.

### **World History (1 credit):**

World History Studies is a survey of the history of humankind. Due to the expanse of world history and the time limitations of the school year, the scope of this course should focus on "essential" concepts and skills that can be applied to various eras, events, and people within the standards in subsection (c) of this section. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present.

Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in other parts of the world. Students evaluate the causes and effects of political and economic imperialism and of major political revolutions since the 17th century. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which constitutional governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and political concepts. Students examine the history and impact of major religious and philosophical traditions. Students analyze the connections between major developments in science and technology and the growth of industrial economies, and they use the process of historical inquiry to research, interpret, and use multiple sources of evidence.

### **World History-Honors (1 credit):**

This course includes all requirements of the corresponding academic level class plus substantial enrichment experiences. In the Honors class, students are expected to achieve a greater depth of understanding through thoughtful discussion and reading. The level of instruction/curriculum will focus on preparing the student for Dual Credit social studies courses.

**U.S. History (1 credit):**

Students study the history of the United States from 1877 to the present. The course content is based on the founding documents of the U.S. government, which provide a framework for its heritage. Historical content focuses on the political, economic, and social events and issues related to industrialization and urbanization, major wars, domestic and foreign policies, and reform movements, including civil rights. Students examine the impact of geographic factors on major events and eras and analyze their causes and effects. Students examine the impact of constitutional issues on American society, evaluate the dynamic relationship of the three branches of the federal government, and analyze efforts to expand the democratic process. Students describe the relationship between the arts and popular culture and the times during which they were created. Students analyze the impact of technological innovations on American life. Students use critical-thinking skills and a variety of primary and secondary source material to explain and apply different methods that historians use to understand and interpret the past, including multiple points of view and historical context.

**U.S. Government (0.5 credit):**

In United States Government, the focus is on the principles and beliefs upon which the United States was founded and on the structure, functions, and powers of government at the national, state, and local levels. This course is the culmination of the civic and governmental content and concepts studied from Kindergarten through required secondary courses. Students learn major political ideas and forms of government in history. A significant focus of the course is on the U.S. Constitution, its underlying principles and ideas, and the form of government it created. Students analyze major concepts of republicanism, federalism, checks and balances, separation of powers, popular sovereignty, and individual rights and compare the U.S. system of government with other political systems. Students identify the role of government in the U.S. free enterprise system and examine the strategic importance of places to the United States. Students analyze the impact of individuals, political parties, interest groups, and the media on the American political system, evaluate the importance of voluntary individual participation in a constitutional republic, and analyze the rights guaranteed by the U.S. Constitution. Students examine the relationship between governmental policies and the culture of the United States. Students identify examples of government policies that encourage scientific research and use critical-thinking skills to create a product on a contemporary government issue.

**Economics (0.5 credit):**

The focus is on the basic principles concerning production, consumption, and distribution of goods and services (the problem of scarcity) in the United States and a comparison with those in other countries. Students analyze the interaction of supply, demand, and price. Students will investigate the concepts of specialization and international trade, economic growth, key economic measurements, and monetary and fiscal policy. Students will study the roles of the Federal Reserve System and other financial institutions, government, and business in a free enterprise system. Types of business ownership and market structure are discussed. The course also incorporates the instruction of personal financial literacy. Students apply critical thinking skills using economic concepts to evaluate the costs and benefits of economic issues.

**HISTORY 1301- US History I-Fall Semester (Dual Credit)****HISTORY 1302- US History II-Spring Semester (Dual Credit)**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Junior standing & teacher approval; completion of World Geography and World History*

Dual Credit US History is a course that surveys the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. Upon successful completion of this semester/year long course, the student will earn three (3)/ (6) hours of college US History credit, as well as his or her high school junior History credit.

*Fee:* see counselor for details

**AMERICAN GOVERNMENT 2305 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Senior standing & teacher approval; completion of World Geography, World History, U.S. History*

Dual Credit Government is a survey of national, state, and local government, including such topics as the U.S. and Texas Constitutions; democratic theory; federalism; political culture, political socialization, and public opinion, political participation and electoral behavior; political parties and interest groups; press; and local government. These phenomena are examined at the national, state, and local levels with an emphasis placed on linkages with the formulation of public policy. Upon successful completion of this semester long course, the student will earn three (3) hours of college Government credit, as well as his or her high school Government credit.

*Fee:* see counselor for details

**ECONOMICS 2301 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Senior standing & teacher approval; completion of World Geography, World History, U.S. History, and Government*

Dual Credit Economics is a study of macroeconomic principles. Analysis of theories of consumer behavior, production, cost, equilibrium analysis in product markets under different market structures, such as perfect competition, monopoly, monopolistic competition, oligopoly; cartels and conglomerate mergers; antitrust policy, economics of regulation; analysis of different types of factor markets and factor price determination. Upon successful completion of this semester long course, the student will earn three (3) hours of college Economics credit, as well as his or her high school senior Economics credit.

*Fee:* see counselor for details

**TEXAS GOVERNMENT 2306-Spring Semester (Dual Credit):**

*Prerequisite: American Government 2305*

Texas Government discusses the origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.

*Fee:* see counselor for details

**INTRODUCTION TO SOCIOLOGY 1301 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Sophomore standing & teacher approval*

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance, state, and local levels with an emphasis placed on linkages with the formulation of public policy. Upon successful completion of this semester long course, the student will earn three (3) hours of college Sociology credit, as well as an elective credit.

*Fee: see counselor for details*

**GENERAL PSYCHOLOGY 2301 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Sophomore standing & teacher approval*

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. Upon successful completion of this semester long course, the student will earn three (3) hours of college Psychology credit, as well as an elective credit.

*Fee: see counselor for details*

## **PHYSICAL EDUCATION COURSES**

**Physical Education (1 credit):**

Physical education deals with physical fitness and lifetime physical activities. This course emphasizes the importance of a well-rounded program of physical fitness in everyday life. An introduction to health concepts of nutrition, with an emphasis on self-control and goal setting will be taught.

**Boys Athletics (1 credit):**

Instruction will consist of the sport in season. Included will be agility training, weights, running, goal setting, skills and developing a positive mental attitude (Sports offered for participation are: Basketball, Baseball, Cross Country, and Track)

**Girls Athletics (1 credit):**

Instruction will consist of the sport in season. Included will be agility training, weights, running, goal setting, skills and developing a positive mental attitude (Sports offered for participation are: Cross Country, Volleyball, Basketball, Softball, and Track)

## **FINE ARTS COURSES**

**Theatre Arts (1 credit):**

Basic introduction to Theater arts. Topics include terminology, basic stage movement, pantomime, improvisation, overcoming stage fright, evaluating Theater productions, Theater etiquette, and basic performance skills including character development and script structure.



**Art (1 credit):**

In Art, students will study four basic strands--foundations: observation and perception; creative expression; historical and cultural relevance; and critical evaluation and response--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Each strand is of equal value and may be presented in any order throughout the year. Students rely on personal observations and perceptions, which are developed through increasing visual literacy and sensitivity to surroundings, communities, memories, imaginings, and life experiences as sources for thinking about, planning, and creating original artworks. Students communicate their thoughts and ideas with innovation and creativity. Through art, students challenge their imaginations, foster critical thinking, collaborate with others, and build reflective skills.

**Music (1 credit):**

Elementary Music (Grades PK-6) is an introductory music class. The focus of this class is to provide students with many enjoyable experiences in music and opportunity to learn and develop a variety of music-related skills. Through singing, playing, listening and reading, students will experience the various elements of music. Students will be introduced to various styles and kinds of music as well as having opportunities to excel in musical performance, reading music and musical literature, and evaluating musical form with varying structures.

**Principles of Floral Design (1 credit):**

To be prepared for careers in floral design, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. This course 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.

**Advanced Floral Design (1 credit):**

Advanced Floral Design continues 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 participate in lab-based activities throughout most of the course.

## **SPEECH COURSES**

**Professional Communications (0.5 credit):**

Professional Communications blends written, oral, and graphic communication in a career based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

## **Career and Technology Curriculum**

### **Philosophy:**

Career Technical Education (CTE) Programs will engage every student in high-quality, rigorous and relevant educational pathways and programs developed in partnership with business and industry promoting creativity, innovation, leadership, community service and lifelong learning. The CTE curriculum will provide industry-linked programs and services that enable all individuals to reach their career goals in order to achieve economic self-sufficiency, compete in the global marketplace and contribute to the nation's economic prosperity.

### **iCEV Grades 6-12**

<https://www.icevonline.com/>

- Career and Technology Education Online Curriculum platform
- Multimedia lessons
- Customizable courses
- Industry Certifications available



## **BUSINESS AND INDUSTRY COURSES**

### **Agricultural Structures Design and Fabrication (1 credit):**

Students will explore career opportunities, entry requirements, and industry expectations. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural structures design and fabrications.

### **Agricultural Mechanics and Metal Technologies (1 credit):**

Agricultural Mechanics and Metal Technologies is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal working techniques. To prepare for careers in agricultural power, structural, and technical systems, students must attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the industry; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.

### **Agriculture Equipment Design and Fabrication (1 credit):**

Students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural equipment design and fabrication. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

### **Principles of Agriculture, Food, and Natural Resources (1 credit):**

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

**Practicum in Agriculture, Food, and Natural Resources I/II (2 credits):**

Extended Practicum in Agriculture, Food, and Natural Resources is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Career Cluster.

**Money Matters (1 credit):**

Students will investigate global economics with emphasis on the free enterprise system and its impact on consumers and businesses. Students apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to set long-term financial goals based on those options. Students will determine methods of achieving long-term financial goals through investment, tax planning, asset allocation, risk management, retirement planning, and estate planning.

**Math Applications in Agriculture, Food, & Natural Resources (1 credit):**

To be prepared for careers in agriculture, food, and natural resources, students must acquire technical knowledge in the discipline as well as apply academic skills in mathematics. Students should apply knowledge and skills related to mathematics, including algebra, geometry, and data analysis in the context of agriculture, food, and natural resources. To prepare for success, students are afforded opportunities to reinforce, apply, and transfer their knowledge and skills related to mathematics in a variety of contexts.

**Dollars and Sense (0.5 credit):**

Dollars and Sense focuses on consumer practices and responsibilities, money-management processes, decision-making skills, impact of technology, and preparation for human services careers.

**Small Animal Management (0.5 credit):**

In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds.

**Equine Science (0.5 credit):**

This course is designed to introduce students to the scientific principles of equine animal systems and to the equine industry. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

**Livestock Production (1 credit):**

In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry.

**Project-Based Capstone (1 credit):**

Career and Technical Education Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students work independently or collaboratively with others within or across career clusters or programs of study. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts.

**Landscape Design and Management (0.5 credit):**

Landscape Design and Management is designed to develop an understanding of landscape design and management techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

**Turf Grass Management (0.5 credit):**

Turf Grass Management is designed to develop an understanding of turf grass management techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

**Horticulture Science (1 credit):**

Horticultural Science is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

**Wildlife, Fisheries, and Ecology Management (1.0 credit)-** examines the management of game and non-game wildlife species, fish, and aqua crops and their ecological needs as related to current agricultural practices. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

**Veterinary Medical Applications (1.0 credit)--** covers topics relating to veterinary practices, including practices for large and small animal species.

## **PUBLIC SERVICES COURSES**

**Principles of Health Science (1 credit):**

Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

**Medical Terminology (1 credit):**

This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

**Health Science Theory (1 credit):**

The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

**Health Science Clinical (1 credit):**

The Health Science Clinical course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

**Disaster Response (1 credit):**

Disaster Response includes basic training of students in disaster survival and rescue skills that would improve the ability of citizens to survive until responders or other assistance could arrive. Students will receive education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues and disasters of all kinds.

**Principles of Human Services (1 credit):**

This course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care 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.

**Principles of Community Services (1 credit):**

The purpose of this course is to introduce high school students to the field of non-profits/community service, as well as explore career options that provide assistance for individuals and families in need. The students will understand policies, design community service plans, and develop a portfolio of different community and state resources. Students will be encouraged to job shadow, volunteer for community service-based experiences, and participate in service-learning opportunities.

**Child Development (1 credit):**

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 the well-being and healthy development of children and investigate careers related to the care and education of children.

**Counseling and Mental Health (1 credit):**

Students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities.

**Human Growth and Development (1 credit):**

Human Growth and Development is an examination of human development across the lifespan with emphasis on research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.

**Family and Community Services (1 credit):**

Family and Community Services is a laboratory-based course designed to involve students in realistic and meaningful community-based activities through direct service or service-learning experiences. Students are provided opportunities to interact with and provide services to individuals, families, and the community through community or volunteer services. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics.

**Interpersonal Studies (0.5 credit):**

Students examine how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

**Social and Community Services (1.0 credit):**

Social and Community Services will provide an overview of the nonprofit, social, community service, and faith-based organization sector in the United States. The course has an emphasis on professional practices and development of the skills needed to implement service programs. The Social and Community Services course builds on knowledge from Principles of Community Services by providing an in-depth study of social services and how they relate to all other family and community services. Topics covered include the roles of community service providers in meeting human service needs, the sociological factors on clients receiving services, and the exploration of careers.

**Lifetime Nutrition and Wellness (0.5 credit):**

Lifetime Nutrition and Wellness is a laboratory course that allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences.

**Principles of Hospitality and Tourism (1 credit):**

Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.

**Introduction to Culinary Arts (1 credit):**

Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills.

**Entrepreneurship (1 credit):**

Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services.

**Digital Design and Media Production (1 credit):**

Digital Design and Media Production will allow students to demonstrate creative thinking, develop innovative strategies, and use communication tools in order to work effectively with others as well as independently. Students will gather information electronically, which will allow for problem solving and making informed decisions regarding media projects. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will demonstrate a thorough understanding of digital design principles that is transferable to other disciplines. 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.

**Clinical Ethics (1.0 credit)-** The Clinical Ethics course is a practical review of a discipline that provides a structured approach to assist health professionals in identifying, analyzing, and resolving ethical issues that arise in clinical practice. Students analyze ongoing developments in advanced medical technology. The course may raise awareness of or concerns about the ethical dimensions of clinical care. Students will leave the course with a practical awareness of how to respect diverse perspectives on ethics, morals, and values in healthcare.

**Tourism Marketing Concepts and Applications (1.0 credit)-** will provide students with a thorough understanding of marketing concepts and theories that apply to the travel and tourism industry to include lodging, food and beverage operations, recreation, amusements, attractions, convention and visitors' bureaus and tourism companies. While general concepts of marketing for travel and tourism are similar to the marketing of other products and services, the travel and tourism industry has unique characteristics that create a variety of challenges and opportunities specific to and important for tourism marketing professionals. Students will learn broad tourism marketing concepts such as understanding a product/service, pricing out a product/service, promoting a product/service with a focus on direct sales and the placement or distribution channels for a product. They will also be introduced to the concepts of markets, market segmentation, and customer needs related to the tourism industry.

**Practicum in Health Science (2.0 credits)-** is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

**Practicum in Human Services (2.0 credits)-**provides background knowledge and occupation-specific training that focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community-services careers. Content for Practicum in Human Services is designed to meet the occupational preparation needs and interests of students and should be based upon the knowledge and skills selected from two or more courses in a coherent sequence in the human services cluster.

## **DUAL-CREDIT COURSES**

### **ENGLISH 1301- Freshman Composition I-Fall Semester (Dual Credit):**

### **ENGLISH 1302-Freshman Composition II-Spring Semester (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Junior or Senior standing & teacher approval*

Students enrolled in the college course will receive dual credit. The course will focus on developing core skills in reading, critical thinking, writing, and speaking. It emphasizes the writing process and includes standard language conventions. Prose analysis techniques commonly needed for college courses and career responsibilities are also presented. Upon successful completion of this semester/year long course, the student will earn three (3)/(6)hours of college English credit, as well as his or her high school junior or senior English credit.

### **HISTORY 1301- US History I-Fall Semester (Dual Credit):**

### **HISTORY 1302- US History II-Spring Semester (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Junior standing & teacher approval; completion of World Geography and World History*

Dual Credit US History is a course that surveys the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. Upon successful completion of this semester/year long course, the student will earn three (3)/(6)hours of college US History credit, as well as his or her high school junior History credit.

### **AMERICAN GOVERNMENT 2305 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Senior standing & teacher approval; completion of World Geography, World History, U.S. History*

Dual Credit Government is a survey of national, state, and local government, including such topics as the U.S. and Texas Constitutions; democratic theory; federalism; political culture, political socialization, and public opinion, political participation and electoral behavior; political parties and interest groups; press; and local government. These phenomena are examined at the national, state, and local levels with an emphasis placed on linkages with the formulation of public policy. Upon successful completion of this semester long course, the student will earn three (3) hours of college Government credit, as well as his or her high school Government credit.

### **TEXAS GOVERNMENT 2306-Spring Semester (Dual Credit):**

*Prerequisite: American Government 2305*

Texas Government discusses the origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.



**ECONOMICS 2301 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Senior standing & teacher approval; completion of World Geography, World History, U.S. History, and Government*

Dual Credit Economics is a study of macroeconomic principles. Analysis of theories of consumer behavior, production, cost, equilibrium analysis in product markets under different market structures, such as perfect competition, monopoly, monopolistic competition, oligopoly; cartels and conglomerate mergers; antitrust policy, economics of regulation; analysis of different types of factor markets and factor price determination. Upon successful completion of this semester long course, the student will earn three (3) hours of college Economics credit, as well as his or her high school senior Economics credit.

**INTRODUCTION TO SOCIOLOGY 1301 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Sophomore standing & teacher approval*

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance, state, and local levels with an emphasis placed on linkages with the formulation of public policy. Upon successful completion of this semester long course, the student will earn three (3) hours of college Sociology credit, as well as an elective credit.

**GENERAL PSYCHOLOGY 2301 (Dual Credit):**

*Prerequisite(s): Acceptable TSIA scores or the ability to exempt TSI; Sophomore standing & teacher approval*

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. Upon successful completion of this semester long course, the student will earn three (3) hours of college Psychology credit, as well as an elective credit.

## **Graduation Requirements**

The Foundation High School Program is a flexible graduation program that allows all students to pursue their interests and prepare for high-wage, high-skill, and in-demand occupations.

Students may customize their high school experience beyond the Foundation High School Program by completing requirements for additional components such as endorsements, the distinguished level of achievement, and performance acknowledgments.

The Foundation High School Program identifies the requirements that all Texas public school students need to satisfy to earn a high school diploma.

**Foundation High School Plan (FHSP) – 22 credits**

- (4) English
- (3) Math - including Algebra and Geometry, Advanced Math
- (3) Science - including Biology and Chemistry, Physics or IPC, Advanced Science
- (3) Social Studies - including US History, Government and Economics and either World Geography or World History
- (2) Languages Other Than English - Level I and II of the same language
- (1) Fine Arts
- (1) Physical Education – PE class or Athletics
- (5) Electives

**Foundation High School Plan (FHSP) with Endorsement – 26 credits**

- (4) English
- (4) Math - including Algebra and Geometry, Advanced Math
- (4) Science - including Biology and Chemistry or Physics, Advanced Science
- (3) Social Studies - including US History, Government and Economics and either World Geography or World History
- (2) Languages Other Than English - Level 1 and II of the same language
- (1) Fine Arts
- (1) Physical Education – PE class or Athletics
- (7) Electives

**Foundation High School Plan (FHSP) with Endorsement and Distinguished Level of Achievement – 26 credits**

- (4) English
- (4) Math - including Algebra, Geometry and Algebra 2
- (4) Science - including Biology and Chemistry or Physics, Advanced Science
- (3) Social Studies - including US History, Government and Economics and either World Geography or World History
- (2) Languages Other Than English - Level 1 and II of the same language
- (1) Fine Arts
- (1) Physical Education – PE class or Athletics
- (7) Electives

\* Foundation High School Plan (FHSP) is the minimum requirements to graduate from a Texas High School. Students may not consider this plan until both their 16th birthday and the completion of 10th grade.

\*Only applicants who have completed the Foundation Plan with Endorsement or Distinguished Level of Achievement are eligible to apply for admission to a four-year Texas institution.

**Distinguished Level of Achievement**

The distinguished level of achievement requires:

- A total of four credits in math, including Algebra II;
- A total of four credits in science; and
- Successful completion of an endorsement in your area of interest.

A student must earn the distinguished level of achievement to be admitted to a Texas public university under the Top 10 percent automatic admission law.

## **Course Requirements for the 5 Endorsements**

Students may earn one or more endorsements as part of their high school diploma. An endorsement consists of a sequence of courses that are grouped together by interest or occupational skill. They provide students with in-depth knowledge of a subject area or a high-wage, high-skill, and in-demand occupation. Every career and technical education (CTE) Program of Study leads to an endorsement.

Students earn an endorsement by completing four credits each in both math and science, two additional elective credits, and the curriculum requirements for the

	<b>Science, Technology, Engineering &amp; Math</b>	<b>Business &amp; Industry</b>	<b>Arts and Humanities</b>	<b>Public Services</b>	<b>Multidisciplinary</b>
<b>Electives Appropriate for programs of study in the Texas career clusters (7 credits)</b>	<i>Science (5 credits)</i>  <i>Math (5 credits)</i>	<i>Agriculture, Food, &amp; Natural Resources</i>	<i>Social Studies (5 credits, including Psychology &amp; Sociology)</i>	<i>Human Services</i>	<i>Four advanced courses from within one endorsement area that are not in a coherent sequence, OR</i>
				<i>Health Sciences</i>	<i>Four credits in each of the four foundation subject areas to include Eng IV and chemistry and/or physics</i>

endorsement.

## **Programs of Study**

Programs of study are course sequences that prepare students with the knowledge and skills necessary for success in their chosen career. These sequences embed relevant, real world experiences and culminate in a postsecondary credential. Courses included in the programs of study sequences will meet one or more endorsements.



## Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

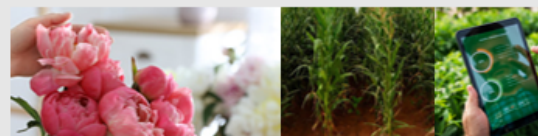
### Statewide Program of Study: Plant Science

The Plant Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of plants and other living organisms. This program of study includes the application of biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

### Secondary Courses for High School Credit



- |                |  |
|----------------|--|
| <b>Level 1</b> | <ul style="list-style-type: none"> <li>Principles of Agriculture, Food, and Natural Resources</li> </ul>   |
| <b>Level 2</b> | <ul style="list-style-type: none"> <li>Landscape Design and Management</li> <li>Turf Grass Management</li> <li>Entrepreneurship I</li> </ul>   |
| <b>Level 3</b> | <ul style="list-style-type: none"> <li>Horticultural Science</li> <li>Floral Design</li> </ul>   |
| <b>Level 4</b> | <ul style="list-style-type: none"> <li>Advanced Plant and Soil Science</li> <li>Advanced Floral Design</li> <li>Career and Technical Education Project-Based Capstone</li> <li>Practicum in Agriculture, Food, and Natural Resources</li> <li>Practicum in Agriculture, Food, and Natural Resources + Extended</li> <li>Practicum in Agriculture, Food, and Natural Resources</li> </ul> |



### Example Postsecondary Opportunities

#### Apprenticeships

- Horticulturist

#### Associate Degrees

- Biology/Biological Sciences
- Biological and Physical Sciences

#### Bachelor's Degrees

- Horticulture
- Plant Pathology/Phytopathology

#### Master's, Doctoral, and Professional Degrees

- Plant Breeding
- Botany/Plant Biology

#### Additional Stackable IBCs/License

- Nursery Floral License
- Horticulturist Certification



### Aligned Advanced Academic Courses

#### Dual Credit

Dual credit offerings will vary by local education agency.

Students should be advised to consider these course opportunities to enrich their preparation.

### Work-Based Learning and Expanded Learning Opportunities

#### Work-Based Learning Activities

- Work in a part-time job at a landscaping company to learn about production and management of plants.
- Intern at an agricultural research company, working alongside a biological technician to learn about application of biology to plant production

#### Expanded Learning Opportunities

- Participate in an FFA career, leadership, and speaking contest like an agriscience fair
- Participate in an industry-related competition like an agriscience fair

### Aligned Industry-Based Certifications

- BASF Plant Science Certification
- Principles of Floral Design Certification
- Texas State Florists' Association Knowledge Based Floral Certification
- Texas State Florists' Association Level I Floral Certification



### Example Aligned Occupations

#### Pesticide Handlers, Sprayers, and Applicators, Vegetation

Median Wage: \$46,153  
Annual Openings: 205  
10-Year Growth: 17%

#### Biological Technicians

Median Wage: \$45,787  
Annual Openings: 879  
10-Year Growth: 14%

#### Farmers, Ranchers, and Other Agricultural Managers

Median Wage: \$65,490  
Annual Openings: 28,020  
10-Year Growth: 4%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Plant Science program of study will fulfill requirements of the Business and Industry endorsement.



# Agriculture, Food, and Natural Resources Career Cluster

## Statewide Program of Study: *Plant Science*

### Course Information

#### Level 1

Course	Prerequisites   Corequisites	Career Clusters
<b>Principles of Agriculture, Food, and Natural Resources*</b> 13000200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

#### Level 2

Course	Prerequisites   Corequisites	Career Clusters
<b>Landscape Design and Management</b> 13001900 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Turf Grass Management</b> 13001950 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Entrepreneurship I*</b> 13011101 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Business, Marketing and Finance Recommended Corequisites: None	

\* Indicates course is included in more than one program of study.

#### Level 3

Course	Prerequisites   Corequisites	Career Clusters
<b>Horticultural Science</b> 13002000 (1 credit)	Prerequisites: At least one credit in a course from the AFNR career cluster Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Floral Design</b> 13001800 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

#### Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Advanced Plant and Soil Science</b> 13002100 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Biology, Integrated Physics and Chemistry, Chemistry, or Physics and a minimum of one credit in a course from the AFNR career cluster Recommended Corequisites: None	
<b>Advanced Floral Design</b> N1300270 (1 credit)	Prerequisites: Floral Design Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

*Continued on next page*

For additional information on the Agriculture, Food, and Natural Resources career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Kori Batten, 11390 5th St., North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nizisd.org](mailto:batten@nizisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



## Agriculture, Food, and Natural Resources Career Cluster

### Statewide Program of Study: *Plant Science*

#### Course Information

Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Career and Technical Education Project-Based Capstone*</b> First Time Taken: 12701101 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Practicum in Agriculture, Food, and Natural Resources*</b> First Time Taken: 13002500 (2 credits) Second Time Taken: 13002510 (2 credits)	<b>Prerequisites:</b> A minimum of two credits with at least one course in a Level 2 or higher course from the AFNR career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Practicum in Agriculture, Food, and Natural Resources + Extended Practicum in Agriculture, Food, and Natural Resources*</b> First Time Taken: 13002505 (3 credits) Second Time Taken: 13002515 (3 credits)	<b>Prerequisites:</b> A minimum of two credits with at least one course in a Level 2 or higher course from the AFNR career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	

\* Indicates course is included in more than one program of study.

For additional information on the **Agriculture, Food, and Natural Resources** career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Kori Batten, 11390 5<sup>th</sup> St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nizisd.org](mailto:batten@nizisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



## Human Services Career Cluster

The Human Services career cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs, such as counseling and mental health services, family and community services, personal care services, and consumer services. This career cluster includes occupations ranging from community health workers to cosmetologists and nutritionists.

### Statewide Program of Study: Family and Community Services

The Family and Community Services program of study focuses on occupational and educational opportunities associated with social services, including child and human development and consumer sciences. This program of study includes managing social and community services, managing family and consumer sciences, and understanding career paths in social work or therapy for children, families, or school communities.



#### Secondary Courses for High School Credit

- |                |  |
|----------------|--|
| <b>Level 1</b> | <ul style="list-style-type: none"> <li>Principles of Human Services</li> <li>Principles of Community Services</li> <li>Professional Communications</li> <li>Dollars and Sense</li> </ul>                                 |
| <b>Level 2</b> | <ul style="list-style-type: none"> <li>Human Growth and Development</li> <li>Child Development</li> <li>Lifetime Nutrition and Wellness</li> <li>Interpersonal Studies</li> <li>Entrepreneurship I</li> </ul>            |
| <b>Level 3</b> | <ul style="list-style-type: none"> <li>Family and Community Services</li> <li>Counseling and Mental Health</li> </ul>  |
| <b>Level 4</b> | <ul style="list-style-type: none"> <li>Career and Technical Education Project-Based Capstone</li> <li>Practicum in Human Services</li> <li>Practicum in Human Services + Extended Practicum in Human Services</li> </ul> |



#### Example Postsecondary Opportunities

##### Apprenticeships

- Community Health Worker Apprentice

##### Associate Degrees

- Social Work
- Human Development and Family Studies

##### Bachelor's Degrees

- Social Work
- Human Development and Family Studies

##### Master's, Doctoral, and Professional Degrees

- Mental Health Counseling
- Marriage and Family Therapy

##### Additional Stackable IBCs/License

- Certified Diabetes Educator



#### Aligned Advanced Academic Courses

##### Dual Credit

Dual credit offerings will vary by local educational agency.

Students should be advised to consider these course opportunities to enrich their preparation.

#### Work-Based Learning and Expanded Learning Opportunities

##### Work-Based Learning Activities

- Participate in a community health worker apprenticeship at a community health center
- Shadow a social worker in a community non-profit organization to learn about providing social and community services

##### Expanded Learning Opportunities

- Participate in FCCLA

#### Aligned Industry-Based Certifications

- Community Health Worker



#### Example Aligned Occupations

##### Community Health Workers

Median Wage: \$39,520  
Annual Openings: 501  
10-Year Growth: 25%

##### Social and Human Service Assistants

Median Wage: \$38,442  
Annual Openings: 3,298  
10-Year Growth: 21%

##### Child, Family, and School Social Workers

Median Wage: \$49,398  
Annual Openings: 2,342  
10-Year Growth: 14%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:  
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Family and Community Services program of study will fulfill requirements of the Public Service endorsement.





## Human Services Career Cluster

Statewide Program of Study: *Family and Community Services*

### Course Information

#### Level 1

Course	Prerequisites   Corequisites	Career Clusters
<b>Principles of Human Services*</b> 13024200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Principles of Community Services*</b> N1302542 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Professional Communications</b> 13009900 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Dollars and Sense*</b> 13024300 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Human Services Recommended Corequisites: None	

#### Level 2

Course	Prerequisites   Corequisites	Career Clusters
<b>Human Growth and Development*</b> 13014300 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Education and Training or Principles of Human Services Recommended Corequisites: None	
<b>Child Development*</b> 13024700 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Education and Training or Principles of Human Services Recommended Corequisites: None	
<b>Lifetime Nutrition and Wellness*</b> 13024500 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Human Services, Principles of Hospitality and Tourism, or Principles of Health Science Recommended Corequisites: None	
<b>Interpersonal Studies*</b> 13024400 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Human Services, Principles of Hospitality and Tourism, Principles of Health Science, or Principles of Education and Training Recommended Corequisites: None	

*Continued on next page*

\* Indicates course is included in more than one program of study.

For additional information on the Human Services career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Kori Batten, 11390 5th St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nizisd.org](mailto:batten@nizisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).
















## Human Services Career Cluster




### Statewide Program of Study: Family and Community Services

#### Course Information












#### Level 2

Course	Prerequisites   Corequisites	Career Clusters
<b>Social and Community Services</b> N1302543 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Principles of Community Services <b>Recommended Corequisites:</b> None	 
<b>Entrepreneurship I*</b> 13011101 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Principles of Business, Marketing and Finance <b>Recommended Corequisites:</b> None	         

#### Level 3

Course	Prerequisites   Corequisites	Career Clusters
<b>Family and Community Services*</b> 13024900 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Principles of Human Services <b>Recommended Corequisites:</b> None	
<b>Counseling and Mental Health*</b> 13024600 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Principles of Human Services <b>Recommended Corequisites:</b> None	 

#### Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Career and Technical Education Project-Based Capstone</b> First-Time Taken: 12701101 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	         
<b>Practicum in Human Services*</b> First Time Taken: 13025000 (2 credits) Second Time Taken: 13025010 (2 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Practicum in Human Services + Extended Practicum in Human Services*</b> First Time Taken: 13025005 (3 credits) Second Time Taken: 13025015 (3 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	

\* Indicates course is included in more than one program of study.

For additional information on the Human Services career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Kori Batten, 11390 5th St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nzisd.org](mailto:batten@nzisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](https://tea.texas.gov/cte).



## Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

### Statewide Program of Study: Animal Science

The Animal Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of animals and other living organisms. This program of study includes applying biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students will research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.



### Secondary Courses for High School Credit

- |                |  |
|----------------|--|
| <b>Level 1</b> | <ul style="list-style-type: none"> <li>Principles of Agriculture, Food, and Natural Resources</li> </ul>   |
| <b>Level 2</b> | <ul style="list-style-type: none"> <li>Small Animal Management</li> <li>Equine Science</li> <li>Entrepreneurship I</li> </ul>  |
| <b>Level 3</b> | <ul style="list-style-type: none"> <li>Livestock Production</li> </ul>   |
| <b>Level 4</b> | <ul style="list-style-type: none"> <li>Advanced Animal Science</li> <li>Veterinary Medical Applications</li> <li>Career and Technical Education Project-Based Capstone</li> <li>Practicum in Agriculture, Food, and Natural Resources</li> <li>Practicum in Agriculture, Food, and Natural Resources + Extended Practicum in Agriculture, Food, and Natural Resources</li> </ul> |



### Example Postsecondary Opportunities

#### Apprenticeships

- Reproduction Technician

#### Associate Degrees

- Biological and Physical Sciences
- Entomology

#### Bachelor's Degrees

- Animal Science
- Zoology/Animal Biology

#### Master's, Doctoral, and Professional Degrees

- Marine Sciences
- Biotechnology

#### Additional Stackable IBCs/License

- Veterinarian
- Certified Veterinary Technician



### Aligned Advanced Academic Courses

<b>Dual Credit</b>	Dual credit offerings will vary by local education agency.
--------------------	--

Students should be advised to consider these course opportunities to enrich their preparation. AP or IB courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards concentrator/completer status for this program of study.

### Work-Based Learning and Expanded Learning Opportunities

#### Work-Based Learning Activities

- Shadow an animal scientist in a biology lab to learn about applying science to understand animals and wildlife
- Intern in a veterinary clinic, caring for animals and wildlife being treated in the clinic

#### Expanded Learning Opportunities

- Participate in an FFA career, leadership, and speaking contest like an agriscience fair
- Attend an agricultural industry seminar

### Aligned Industry-Based Certifications

- Elanco Fundamentals of Animal Science Certification
- Elanco Veterinary Medical Applications Certification
- Equine Management and Evaluation Certification



Successful completion of the Animal Science program of study will fulfill requirements of a Business and Industry endorsement.



### Example Aligned Occupations

#### Veterinary Assistants and Laboratory Animal Caretakers

Median Wage: \$29,906  
Annual Openings: 1,348  
10-Year Growth: 24%

#### Veterinary Technologists and Technicians

Median Wage: \$33,679  
Annual Openings: 1,217  
10-Year Growth: 24%

#### Veterinarian

Median Wage: \$103,160  
Annual Openings: 347  
10-Year Growth: 26%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024

For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>





# Agriculture, Food, and Natural Resources Career Cluster

## Statewide Program of Study: Animal Science

### Course Information

#### Level 1

Course	Prerequisites   Corequisites	Career Clusters
<b>Principles of Agriculture, Food, and Natural Resources*</b> 13000200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

#### Level 2

Course	Prerequisites   Corequisites	Career Clusters
<b>Small Animal Management</b> 13000400 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Equine Science</b> 13000500 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Entrepreneurship I*</b> 13011101 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Business, Marketing and Finance Recommended Corequisites: None	

#### Level 3

Course	Prerequisites   Corequisites	Career Clusters
<b>Livestock Production</b> 13000300 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

\* Indicates course is included in more than one program of study.

For additional information on the Agriculture, Food, and Natural Resources career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Keri Batten, 11390 5th St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@naisd.org](mailto:batten@naisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



# Agriculture, Food, and Natural Resources Career Cluster

## Statewide Program of Study: Animal Science

### Course Information

Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Advanced Animal Science</b> 13000700 (1 credit)	<b>Prerequisites:</b> Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Veterinary Medical Applications <b>Recommended Corequisites:</b> None	
<b>Veterinary Medical Applications</b> 13000600 (1 credit)	<b>Prerequisites:</b> Equine Science, Small Animal Management, or Livestock Production <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Career and Technical Education Project-Based Capstone*</b> First Time Taken: 12701101 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Practicum in Agriculture, Food, and Natural Resources*</b> First Time Taken: 13002500 (2 credits) Second Time Taken: 13002510 (2 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> A minimum of one credit from the courses in the AFNR career cluster <b>Recommended Corequisites:</b> None	
<b>Practicum in Agriculture, Food, and Natural Resources + Extended Practicum in Agriculture, Food, and Natural Resources*</b> First Time Taken: 13002505 (3 credits) Second Time Taken: 13002515 (3 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> A minimum of one credit from the courses in the AFNR career cluster <b>Recommended Corequisites:</b> None	

\* Indicates course is included in more than one program of study.

For additional information on the Agriculture, Food, and Natural Resources career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Kori Batten, 11390 5th St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nizisd.org](mailto:batten@nizisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



## Health Science Career Cluster

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

### Statewide Program of Study: *Diagnostic and Therapeutic Services*

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.



### Secondary Courses for High School Credit

<b>Level 1</b>	<ul style="list-style-type: none"> <li>Principles of Health Science</li> <li>Principles of Diagnostic Healthcare</li> <li>Principles of Therapeutic Healthcare</li> <li>Principles of Allied Health</li> <li>Introduction to Dental Science</li> <li>Introduction to Imaging Technology</li> <li>Introduction to Pharmacy Science</li> </ul>
<b>Level 2</b>	<ul style="list-style-type: none"> <li>Medical Terminology</li> <li>Allied Health Therapeutic Services</li> <li>Dental Anatomy and Physiology</li> <li>Disaster Response</li> <li>Imaging Technology I</li> <li>Pharmacy I</li> </ul>
<b>Level 3</b>	<ul style="list-style-type: none"> <li>Anatomy and Physiology</li> <li>Medical Microbiology</li> <li>Medical Assistant</li> <li>Emergency Medical Technician—Basic</li> <li>Clinical Ethics</li> <li>Dental Equipment and Procedures</li> <li>Health Science Theory</li> <li>Health Science Theory + Health Science Clinical</li> <li>Respiratory Therapy I</li> <li>Imaging Technology II</li> <li>Pharmacy II</li> </ul>
<b>Level 4</b>	<ul style="list-style-type: none"> <li>Mathematics for Medical Professionals</li> <li>Pathophysiology</li> <li>Pharmacology</li> <li>Respiratory Therapy II</li> <li>Optical Technician</li> <li>Sterile Processing (TBD)</li> <li>Practicum in Health Science</li> <li>Practicum in Health Science + Extended Practicum in Health Science</li> <li>Career Preparation for Programs of Study</li> <li>Career Preparation for Programs of Study + Extended Career Preparation</li> </ul>

### Aligned Advanced Academic Courses

<b>AP or IB</b>	AP Biology IB Biology SL IB Biology HL	AP Chemistry IB Chemistry SL IB Chemistry HL
<b>Dual Credit</b>	Dual credit offerings will vary by local education agency.	

Students should be advised to consider these course opportunities to enrich their preparation. AP or IB courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards concentrator/completer status for this program of study.

### Work-Based Learning and Expanded Learning Opportunities

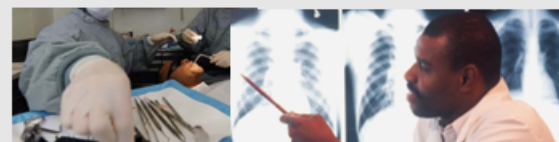
<b>Work-Based Learning Activities</b>	<ul style="list-style-type: none"> <li>Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility</li> <li>Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job</li> </ul>
<b>Expanded Learning Opportunities</b>	<ul style="list-style-type: none"> <li>Participate in Health Occupation Students of America (HOSA) or SkillsUSA</li> <li>Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event</li> </ul>

### Aligned Industry-Based Certifications

- Certified Cardiographic Technician
- Certified Clinical Medical Assistant
- Certified Dental Assistant
- Certified EKG Technician
- Certified Nurse Aide (CNA)
- Certified Occupational Therapy Assistant
- ECG Technician
- Emergency Medical Technician—Basic
- Limited Medical Radiologic Technologist
- Medical Assistant
- Medical Laboratory Assistant
- Medical Laboratory Technician
- Nationally Registered Certified EKG Technician
- Patient Care Technician
- Pharmacy Technician
- Phlebotomy Technician
- Registered Dental Assistant X-Ray Certification
- Emergency Medical Responder
- Certified Respiratory Therapist



Successful completion of the Diagnostic and Therapeutic Services program of study will fulfill requirements of the Public Services endorsement.



### Example Postsecondary Opportunities

#### Apprenticeships

- Medical Assistant

#### Associate Degrees

- Emergency Medical Technology
- Radiologic Technology/Science

#### Bachelor's Degrees

- Emergency Medical Technology
- Medical Insurance Coding

#### Master's, Doctoral, and Professional Degrees

- Medicine
- Occupational Therapy

#### Additional Stackable IBCs/License

- Registered Diagnostic Medical Sonographer



### Example Aligned Occupations

#### Medical Assistants

Median Wage: \$36,834  
 Annual Openings: 11,638  
 10-Year Growth: 29%

#### Dental Hygienists

Median Wage: \$79,663  
 Annual Openings: 1,352  
 10-Year Growth: 32%

#### Physician Assistants

Median Wage: \$127,332  
 Annual Openings: 974  
 10-Year Growth: 41%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:  
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>





## Health Science Career Cluster

### Statewide Program of Study: *Diagnostic and Therapeutic Services*

#### Course Information

Level 1

Course	Prerequisites   Corequisites	Career Clusters
--------	------------------------------	-----------------

**Principles of Health Science\***  
13020200 (1 credit)

**Prerequisites:** None  
**Corequisites:** None  
**Recommended Prerequisites:** None  
**Recommended Corequisites:** None



Level 2

Course	Prerequisites   Corequisites	Career Clusters
--------	------------------------------	-----------------

**Medical Terminology\***  
13020300 (1 credit)

**Prerequisites:** None  
**Corequisites:** None  
**Recommended Prerequisites:** None  
**Recommended Corequisites:** None



**Disaster Response**  
N1303011 (1 credit)

**Prerequisites:** None  
**Corequisites:** None  
**Recommended Prerequisites:** Principles of Law, Public Safety, Corrections, and Security  
**Recommended Corequisites:** None



Course	Prerequisites   Corequisites	Career Clusters
--------	------------------------------	-----------------

**Anatomy and Physiology\***  
13020600 (1 credit)

**Prerequisites:** One credit in Biology and one credit in Chemistry, Integrated Physics and Chemistry, or Physics  
**Corequisites:** None  
**Recommended Prerequisites:** A course from the Health Science career cluster  
**Recommended Corequisites:** None



**Clinical Ethics\***  
N1302121 (1 credit)

**Prerequisites:** None  
**Corequisites:** None  
**Recommended Prerequisites:** Principles of Nursing Science and Science of Nursing  
**Recommended Corequisites:** None



**Health Science Theory\***  
13020400 (1 credit)

**Prerequisites:** One credit in Biology and at least one credit in a course from the Health Science career cluster  
**Corequisites:** None  
**Recommended Prerequisites:** None  
**Recommended Corequisites:** None



**Health Science Theory + Health Science Clinical\***  
13020410 (2 credits)

**Prerequisites:** One credit in Biology and at least one credit in a course from the Health Science career cluster  
**Corequisites:** None  
**Recommended Prerequisites:** None  
**Recommended Corequisites:** None



*Continued on next page*

\* Indicates course is included in more than one program of study.

For additional information on the **Health Science** career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies Title IX Coordinator, Kori Batten, 11390 5<sup>th</sup> St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nizisd.org](mailto:batten@nizisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#)



## Health Science Career Cluster

Statewide Program of Study: **Diagnostic and Therapeutic Services**

### Course Information

Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Pharmacology*</b> 13020950 (1 credit)	<b>Prerequisites:</b> One credit in Biology, one credit in Chemistry, and at least one credit in a Level 2 or higher course from the Health Science career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Practicum in Health Science*</b> First Time Taken: 13020500 (2 credits) Second Time Taken: 13020510 (2 credits)	<b>Prerequisites:</b> Health Science Theory and Biology <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Practicum in Health Science + Extended Practicum in Health Science*</b> First Time Taken: 13020505 (3 credits) Second Time Taken: 13020515 (3 credits)	<b>Prerequisites:</b> Health Science Theory and Biology <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	

\* Indicates course is included in more than one program of study.

For additional information on the Health Science career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies Title IX Coordinator, Kori Batten, 11390 5<sup>th</sup> St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nziisd.org](mailto:batten@nziisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#)



## Hospitality and Tourism Career Cluster

The Hospitality and Tourism career cluster focuses on the management, marketing, and operations of restaurants, lodging, attractions, recreation events, and travel-related services. This career cluster includes occupations ranging from reservation and transportation ticket agent to event planner and general manager.

### Statewide Program of Study: Travel, Tourism, and Attractions

The Travel, Tourism, and Attractions program of study focuses on occupational and educational opportunities associated with the marketing and sales of travel and tourism services. This program of study includes planning, directing, and coordinating marketing or business policies and programs. Students will identify potential customers and determine demand and promotional strategies for products and services.



#### Secondary Courses for High School Credit

- |                |  |
|----------------|--|
| <b>Level 1</b> | <ul style="list-style-type: none"> <li>Principles of Hospitality and Tourism</li> <li>Introduction to Culinary Arts</li> </ul>   |
| <b>Level 2</b> | <ul style="list-style-type: none"> <li>Travel and Tourism Management</li> <li>Entrepreneurship I</li> </ul>  |
| <b>Level 3</b> | <ul style="list-style-type: none"> <li>Tourism Marketing Concepts and Applications</li> </ul>  |
| <b>Level 4</b> | <ul style="list-style-type: none"> <li>Practicum in Event and Meeting Planning</li> <li>Practicum in Hospitality Services</li> <li>Practicum in Hospitality Services + Extended Practicum in Hospitality Services</li> </ul> |



#### Example Postsecondary Opportunities

##### Associate Degrees

- Tourism and Travel Services Management
- E-Commerce/Electronic Commerce

##### Bachelor's Degrees

- Marketing/Marketing Management
- Business/Managerial Economics

##### Master's, Doctoral, and Professional Degrees

- Marketing/Marketing Management
- Tourism and Travel Services Management

##### Additional Stackable IBCs/License

- Tourism Management



#### Aligned Advanced Academic Courses

<b>Dual Credit</b>	Dual credit offerings will vary by local education agency.
--------------------	--

Students should be advised to consider these course opportunities to enrich their preparation

#### Work-Based Learning and Expanded Learning Opportunities

##### Work-Based Learning Activities

- Intern at a local tourism and visitors bureau to learn about managing and marketing attractions and resources
- Work part-time as a tour guide at a local attraction

##### Expanded Learning Opportunities

- Volunteer at a local community event (fair or rodeo)
- Tour an attraction, theme park, or event center
- Participate in FCCLA

#### Aligned Industry-Based Certifications

- Entrepreneurship and Small Business



#### Example Aligned Occupations

##### Reservation and Transportation Ticket Agents and Travel Clerks

Median Wage: \$48,000  
Annual Openings: 2,031  
10-Year Growth: 17%

##### Travel Agents

Median Wage: \$39,991  
Annual Openings: 473  
10-Year Growth: 22%

##### Market Research Analysts and Marketing Specialists

Median Wage: \$60,926  
Annual Openings: 5,688  
10-Year Growth: 35%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.

For more information visit:  
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Travel, Tourism and Attractions program of study will fulfill requirements of the Business and Industry endorsement.





# Hospitality and Tourism Career Cluster

## Statewide Program of Study: Travel, Tourism, and Attractions

### Course Information

#### Level 1

Course	Prerequisites   Corequisites	Career Clusters
<b>Principles of Hospitality and Tourism*</b> 13022200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Introduction to Culinary Arts*</b> 13022550 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Hospitality and Tourism Recommended Corequisites: None	

#### Level 2

Course	Prerequisites   Corequisites	Career Clusters
<b>Travel and Tourism Management*</b> 13022500 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Hospitality and Tourism Recommended Corequisites: None	
<b>Entrepreneurship I*</b> 13011101 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Business, Marketing, and Finance Recommended Corequisites: None	

#### Level 3

Course	Prerequisites   Corequisites	Career Clusters
<b>Tourism Marketing Concepts and Applications*</b> N1302270 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Hospitality and Tourism Recommended Corequisites: None	

*Continued on next page*

\* Indicates course is included in more than one program of study.

For additional information on the Hospitality and Tourism career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Keri Batten, 11390 5th St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@naisd.org](mailto:batten@naisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



## Hospitality and Tourism Career Cluster

### Statewide Program of Study: Travel, Tourism, and Attractions

#### Course Information

#### Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Practicum in Event and Meeting Planning*</b> N1302275 (2 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Introduction to Event Meeting and Planning and Hospitality Services <b>Recommended Corequisites:</b> None	
<b>Practicum in Hospitality Services*</b> First Time Taken: 13022900 (2 credits) Second Time Taken: 13022910 (2 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Hospitality Services <b>Recommended Corequisites:</b> None	
<b>Practicum in Hospitality Services + Extended Practicum in Hospitality Services*</b> First Time Taken: 13022905 (3 credits) Second Time Taken: 13022915 (3 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Hospitality Services <b>Recommended Corequisites:</b> None	

\* Indicates course is included in more than one program of study.

For additional information on the Hospitality and Tourism career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Keri Batten, 11390 5<sup>th</sup> St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nulsd.org](mailto:batten@nulsd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



## Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

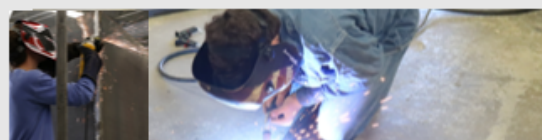
### Statewide Program of Study: Agricultural Technology and Mechanical Systems

The Agricultural Technology and Mechanical Systems program of study focuses on occupational and educational opportunities associated with applying engineering technology and biological science to agricultural problems related to power and machinery, electrification, structures, soil and water use, and processing agricultural products. This program of study includes diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.



#### Secondary Courses for High School Credit

- |         |  |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> <li>Principles of Agriculture, Food, and Natural Resources</li> </ul>   |
| Level 2 | <ul style="list-style-type: none"> <li>Agricultural Mechanics and Metal Technologies</li> </ul>  |
| Level 3 | <ul style="list-style-type: none"> <li>Agricultural Structures Design and Fabrication</li> </ul>   |
| Level 4 | <ul style="list-style-type: none"> <li>Agricultural Equipment Design and Fabrication</li> <li>Career and Technology Project-Based Capstone</li> <li>Practicum in Agriculture, Food, and Natural Resources</li> <li>Practicum in Agriculture, Food, and Natural Resources + Extended Practicum in Agriculture, Food, and Natural Resources</li> </ul> |



#### Example Postsecondary Opportunities

##### Apprenticeships

- Farm Equipment Mechanic I

##### Associate Degrees

- Diesel Mechanics Technology
- Industrial Mechanics and Maintenance Technology

##### Bachelor's Degrees

- Agricultural Engineering
- Agricultural Systems Management

##### Master's, Doctoral, and Professional Degrees

- Agricultural Engineering
- Industrial Technology

##### Additional Stackable IBCs/License

- Diesel Equipment Technology-Off Highway Specialization CER1
- Accredited Farm Manager



#### Aligned Advanced Academic Courses

##### Dual Credit

Dual credit offerings will vary by local education agency.

Students should be advised to consider these course opportunities to enrich their preparation.

#### Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> <li>Participate in a farm mechanic apprenticeship at an equipment production company</li> <li>Intern at an equipment manufacturing facility working with agricultural engineers</li> </ul>
Expanded Learning Opportunities	<ul style="list-style-type: none"> <li>Participate in an FFA career, leadership, and speaking contest like an agriscience fair</li> <li>Participate in an agriculture robotics event</li> </ul>

#### Aligned Industry-Based Certifications

- AWS Certified Welder
- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding



#### Example Aligned Occupations

##### Farm Equipment Mechanics and Service Technicians

Median Wage: \$46,582  
Annual Openings: 326  
10-Year Growth: 23%

##### Mobile Heavy Equipment Mechanics

Median Wage: \$57,943  
Annual Openings: 2,637  
10-Year Growth: 31%

##### Farmers, Ranchers, and Other Agricultural Managers

Median Wage: \$65,490  
Annual Openings: 28,020  
10-Year Growth: 4%



Successful completion of the Agricultural Technology and Mechanical Systems program of study will fulfill requirements of the Business and Industry endorsement.

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study/additional-resources>



# Agriculture, Food, and Natural Resources Career Cluster

## Statewide Program of Study: Agricultural Technology and Mechanical Systems

### Course Information

#### Level 1

Course	Prerequisites   Corequisites	Career Clusters
<b>Principles of Agriculture, Food, and Natural Resources*</b> 13000200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

#### Level 2

Course	Prerequisites   Corequisites	Career Clusters
<b>Agricultural Mechanics and Metal Technologies</b> 13002200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of AFNR Recommended Corequisites: None	

#### Level 3

Course	Prerequisites   Corequisites	Career Clusters
<b>Agricultural Structures Design and Fabrication</b> 13002300 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Agricultural Mechanics and Metal Technologies Recommended Corequisites: None	

#### Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Agricultural Equipment Design and Fabrication</b> 13002350 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Agricultural Mechanics and Metal Technologies Recommended Corequisites: None	
<b>Career and Technical Education Project-Based Capstone*</b> First Time Taken: 12701101 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
<b>Practicum in Agriculture, Food, and Natural Resources*</b> First Time Taken: 13002500 (2 credits) Second Time Taken: 13002510 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: A minimum of one credit from the courses in the AFNR career cluster Recommended Corequisites: None	

*Continued on next page*

\* Indicates course is included in more than one program of study.

For additional information on the Agriculture, Food, and Natural Resources career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Kori Batten, 11390 5th St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nuzisd.org](mailto:batten@nuzisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



# Agriculture, Food, and Natural Resources Career Cluster

## Statewide Program of Study: *Agricultural Technology and Mechanical Systems*

### Course Information

Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Practicum in Agriculture, Food, and Natural Resources + Extended Practicum in Agriculture, Food, and Natural Resources*</b> First Time Taken: 13002505 (3 credits) Second Time Taken: 13002515 (3 credits)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> A minimum of one credit from the courses in the AFNR career cluster <b>Recommended Corequisites:</b> None	

\* Indicates course is included in more than one program of study.

For additional information on the Agriculture, Food, and Natural Resources career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



North Zulch, ISO does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Kori Batten, 11390 5<sup>th</sup> St, North Zulch, TX 77872, (936) 241-7100 x 1604, [batten@nizisd.org](mailto:batten@nizisd.org). Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

## **Additional Graduation Requirements**

- End-of-Course Exam Requirement-In addition to meeting graduation credit requirements, students are required to pass five end-of-course (EOC) exams to earn a diploma from a Texas public high school. Those five exams are given when a student takes English I and II, Biology, Algebra I, and U.S. History. A student who fails an EOC exam for no more than two of five courses can still receive a diploma if he or she qualifies to graduate as a result of an individual graduation committee review.
- Instruction on Proper Interaction with Peace Officers-Students must receive instruction in proper interaction with police officers at least once before graduation from high school.
- Instruction in Cardiopulmonary Resuscitation (CPR)-Students must receive instruction in CPR at least once in grades 7-12 before graduation.
- FAFSA Completion-Beginning with the graduating class of 2022, students must complete the FAFSA/TAFSA or submit an opt-out form.

## **Junior High Course Descriptions**

NZISD offers an accelerated academic program known as the Honors Program. Honors courses are designed to extend and enrich the content of the regular curriculum while preparing students for success in Honors classes and Dual-Credit courses offered in high school. Honors courses are rigorous, demanding and require study time outside of school. These college preparatory classes will provide challenging research opportunities for students with high interest in academic exploration and include out-of-class assignments. Students must be able to balance the time requirements of all their academic classes as well as extracurricular activities in which they choose to participate. Students who take Honors classes, followed by Honors and Dual-Credit courses in high school are more prepared for the rigors of college and are more likely to be successful in college.

### **6<sup>th</sup> - 8<sup>th</sup> Grade Reading Language Arts (RLA):**

Reading Language Arts is organized into the following strands: Reading, where students will read and understand different genres of literature; Writing, where students will compose a variety of written texts; Research, where students will locate, evaluate, synthesize, and present information; Listening and Speaking, where students will develop communication skills; and Oral and Written Conventions, where students will learn how to use the oral and written conventions of the English language in speaking and writing. Standards are cumulative, and students will engage in activities that build on prior knowledge and skills from previous standards in order to strengthen reading, writing, and oral language skills. Students will read and write on a daily basis.

### **6<sup>th</sup> - 8<sup>th</sup> Grade Reading Language Arts (RLA)-Honors:**

Honors Reading Language Arts covers the core curriculum of RLA and expands content and depth through divergent and evaluative thinking, problem solving, and creativity. This advanced academic course requires extensive out-of-class commitment, including a summer reading and other extended reading assignments, individual research, and projects.

**6<sup>th</sup> Grade Math:**

The primary focus in 6<sup>th</sup> grade mathematics is number and operations; proportionality; expressions, equations, and relationships; and measurement and data. Students use concepts, algorithms, and properties of rational numbers to explore mathematical relationships and to describe increasingly complex situations. Students use concepts of proportionality to explore, develop, and communicate mathematical relationships. Students use algebraic thinking to describe how a change in one quantity in a relationship results in a change in the other. Students connect verbal, numeric, graphic, and symbolic representations of relationships, including equations and inequalities. Students use geometric properties and relationships, as well as spatial reasoning, to model, analyze situations, and solve problems. Students communicate information about geometric figures or situations by quantifying attributes, generalize procedures from measurement experiences, and use the procedures to solve problems. Students use appropriate statistics, representations of data, and reasoning to draw conclusions, evaluate arguments, and make recommendations

**6<sup>th</sup> Grade Advanced Math:**

This accelerated course covers the standards for 6th grade math with the primary focus on quantitative reasoning, geometric and spatial reasoning, measurement, probability and statistics, algebraic thinking, and problem solving. Students will connect verbal, numeric, graphic, and symbolic representations of mathematical relationships. Students planning to complete Honors Algebra I in the eighth grade should complete this course. It is recommended that students who chose to enroll in this course in the top 40 percent on the Grade 5 Math STAAR Assessment or demonstrate proficiency in the student's fifth grade mathematics coursework.

**7<sup>th</sup> Grade Math:**

The primary focus of 7th grade mathematics is number operation fluency; proportionality; expressions, equations, and relationships; measurement and data; and probability. Students will use mathematical relationships to generate solutions and to make connections and predictions. Students will apply mathematics to problems arising in the real world, clearly communicate mathematical ideas, and select and utilize appropriate problem solving models.

**7<sup>th</sup> Grade Math-Honors:**

This accelerated course covers the standards for 7th grade as well as 8th grade math to ensure students will be prepared for success in Honors Algebra I. This is an advanced academics course and will require extensive out of class commitment. Quantitative reasoning, geometric and spatial reasoning, measurement, probability and statistics, algebraic thinking, and problem solving are the primary focus of this course. Students will connect verbal, numeric, graphic, and symbolic representations of relationships. Students planning to complete Honors Algebra I in the eighth grade should complete this course. It is recommended that students who chose to enroll in this course score at or above "meets expectations" on the 6th grade STAAR test.

**8<sup>th</sup> Grade Math:**

The primary focus of 8th grade mathematics is proportionality; expressions, equations, and relationships; measurement and data; and foundations of functions. Students will explore mathematical relationships and describe increasingly complex situations. A focus on mathematical fluency and solid understanding allows opportunities for in depth exploration of the topics in this course. Students will apply mathematics to problems arising in the real world, clearly communicate mathematical ideas, and select and utilize appropriate problem solving models.

### **8<sup>th</sup> Grade Algebra I:**

Students will master foundation concepts for high school mathematics. Students will continue to build on this foundation as they expand their understanding through mathematical experiences including: algebraic thinking and symbolic reasoning, function concepts, relationship between equations and functions, tools for algebraic thinking, and underlying mathematical processes.

### **6<sup>th</sup> Grade Science:**

Students conduct field and laboratory investigations using scientific methods and skills that support the development of critical thinking and problem solving. Students will analyze data and make informed decisions using scientific equipment, computers, and information technology to collect, analyze, and record information. As students continue to develop their use of these skills, they also acquire scientific knowledge about the life, physical, and earth sciences. “Hands-on, minds-on” science instruction provides learning experiences, in which students observe, identify, classify, and/or investigate a number of relevant science topics. Major topics included in 6th grade science are matter and energy, force and motion, earth and space science, and organisms and environment.

### **7<sup>th</sup> Grade Science:**

Students conduct field and laboratory investigations using scientific methods and skills that support the development of critical thinking and problem solving. Students will analyze data and make informed decisions using scientific equipment, computers, and information technology to collect, analyze, and record information. As students continue to develop their use of these skills, they also acquire scientific knowledge about the life, physical, and earth sciences. “Hands-on, minds-on” science instruction provides learning experiences, in which students observe, identify, classify, and/or investigate a number of relevant science topics. Major topics included in 7th grade science are matter and energy, force and motion, earth and space science, and organisms and environment.

### **7<sup>th</sup> Grade Science-Honors:**

Students conduct field and laboratory investigations using scientific methods and skills that support the development of critical thinking and problem solving. Students will analyze data and make informed decisions using scientific equipment, computers, and information technology to collect, analyze, and record information. As students continue to develop their use of these skills, they also acquire scientific knowledge about the life, physical, and earth sciences. “Hands-on, minds-on” science instruction provides learning experiences, in which students observe, identify, classify, and/or investigate a number of relevant science topics. Major topics included in 7th grade science are matter and energy, force and motion, earth and space science, and organisms and environment. Course requirements may include lengthy reading assignments, individual research, and projects.

### **8<sup>th</sup> Grade Science:**

Students plan and conduct field and laboratory investigations using scientific methods and skills that support the continued development of critical thinking and problem solving. Students analyze data and make informed decisions using scientific equipment, computers, and information technology to collect, analyze, and record information. As students continue to develop their use of these skills, they also use acquired scientific knowledge about the life, physical, and earth sciences. “Hands-on, minds-on” science instruction provides learning experiences that extend prior science understanding developed in sixth and seventh grades. Students observe, identify, classify, and/or investigate a number of relevant science topics. Major topics included in 8th grade science are matter and energy, force and matter, earth and space science, and organisms and environment.



**8<sup>th</sup> Grade Science-Honors:**

The Science Honors class is differentiated to enable the students to analyze, synthesize, and evaluate the process of life, earth, and physical sciences. Critical thinking skills are utilized throughout all areas of the curriculum to provide each student with the opportunity to discover the complexity of our earth. Each student is encouraged to be curious, imaginative, and flexible in his/her thinking. Opportunities for original thinking and elaboration are built into the daily curriculum. Major topics included in 8th science are matter and energy, force and matter, earth and space science, and organisms and environment. Course requirements may include lengthy reading assignments, individual research, and projects.

**6<sup>th</sup> Grade Social Studies:**

In Grade 6, students study people, places, and societies of the contemporary world. Societies for study are from the following regions of the world: Europe, Russia and the Eurasian republics, North America, Central America and the Caribbean, South America, Southwest Asia-North Africa, Sub-Saharan Africa, South Asia, East Asia, Southeast Asia, Australia, and the Pacific realm. Students describe the influence of individuals and groups on historical and contemporary events in those societies and identify the locations and geographic characteristics of various societies. Students identify different ways of organizing economic and governmental systems. The concepts of limited and unlimited government are introduced, and students describe the nature of citizenship in various societies. Students compare institutions common to all societies such as government, education, and religious institutions.

**7<sup>th</sup> Grade Texas History:**

This course focuses on the exploration and colonization of Texas, the achievement of Texas independence, the political and social history of Texas, and the geography of Texas. Students participate individually and in groups to complete required projects.

**7<sup>th</sup> Grade Texas History-Honors:**

This course focuses on the exploration and colonization of Texas, the achievement of Texas independence, the political and social history of Texas, and the geography of Texas. Students participate individually and in groups to complete required projects. Use of critical thinking skills, analyzing data and Document Based Questions are emphasized. This is an advanced academic course and requires an extensive out-of-class commitment. Course requirements may include lengthy reading assignments and individual research projects.

**8<sup>th</sup> Grade U.S. History:**

This course surveys the development of the United States from its beginning through the Civil War and Reconstruction Period. Students are introduced to U.S. Civics and the methods by which laws are passed by the federal government.

**8<sup>th</sup> Grade U.S. History-Honors:**

United States History Honors incorporates the use of historical data to support modern theories and hypothesis. Special attention is given to the relevance of history to today's world. This class is closely coordinated with Honors English Language Arts to reinforce summarization techniques and research skills. This is an advanced academic course, which requires an extensive out-of-class commitment. Course requirements may include lengthy reading assignments, individual research, and projects.

**Study Skills:**

Students experience the most critical learning, organizing, and communication skills needed to be successful in school and in the workplace. Students will develop the necessary skills to organize, process, manage, prioritize and learn from the massive amounts of information they encounter on a daily basis.

**Health Education:**

The goal of health education is to provide instruction that allows youth to develop and sustain health-promoting behaviors throughout their lives. The understanding and application of these standards will allow students the ability to gather, interpret, and understand health information; achieve health literacy; and adapt to the ever-evolving science of health.

**Technology Applications (0.5 credit):**

In Technology Applications, students make informed decisions by understanding current and emerging technologies, including technology systems, appropriate digital tools, and personal learning networks. As competent researchers and responsible digital citizens, students use creative and computational thinking to solve problems while developing career and college readiness skills.

**Career and College Exploration (0.5 credit):**

The goal of this course is to help students build career awareness and engage in deep exploration and study of the Texas CTE career clusters to create a foundation for success in high school, possible postsecondary studies, and careers. Students research labor market information, learn job seeking skills, and create documents required for employment.

**Dollars and Sense (0.5 credit):**

Dollars and Sense focuses on consumer practices and responsibilities, money-management processes, decision-making skills, impact of technology, and preparation for human services careers.

**Touch System Data Entry (0.5 credit):**

In Touch System Data Entry, students apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students will need to apply touch system data entry skills for production of business documents.

**Professional Communications (0.5 credit):**

Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct internet research.

**Principles of Human Services (1 credit):**

This course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care 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.

**Athletics:**

Athletic courses are open to all students who are interested in competing in interscholastic sports. Sports offered include baseball, volleyball, basketball, track, and cross-country. Students are encouraged to compete in more than one sport. Athletics will not interfere with other activities, but does require afterschool participation in practice and games.

**Physical Education:**

Students participate in activities designed to promote physical fitness, develop good motor skills, and to teach individual and team sports. Other benefits are the development of problem-solving skills, self-discipline, and positive attitudes about self and others. Strong emphasis is placed on wellness and lifetime sports. Students learn about target heart rate, proper exercise for weight loss/gain, muscle toning, flexibility, cardiovascular endurance, and muscular endurance.

## **Pre-Kindergarten**

**CIRCLE**

**<https://cliengage.org/public/>**

CLI uses assessment data to help early childhood teachers understand student skill levels and individualize instruction to support areas in which students are at-risk for falling significantly behind. Formative assessments track the use of quality teaching behaviors and setting goals for improvement based on results.

**Launchpad for Pre-K**

**<https://www.reallygreatreading.com/launchpad-prek>**

Launchpad is playful and powerful evidence-based phonics and pre-reading skills instruction that prepares students for kindergarten. Launchpad is game-based, teacher-led, Interactive, kinesthetic, and multisensory instruction.



# **Data Analysis, Assessment & Planning Tool**

## **Eduphoria!**

<http://www.eduphoria.net/>



Eduphoria consists of a suite of web-based applications developed to assist educators with their assessment and curriculum needs.

### **Forethought**

- Teachers create and submit weekly lesson plans
- Teams or Departments may share views
- Feedback is provided through "Notes" feature

### **AWARE**

- Disaggregate STAAR, TELPAS, and Benchmark student data
- Create district, campus, teacher, and individual student reports from state data
- Heat maps to identify student performance at the student expectation (SE) level of the TEKS to guide instruction.
- Use local assessment data to create tutorial groups for differentiated instruction
- Create customized local assessments that can be saved and shared.
- Includes test questions aligned to the TEKS.
- Automatic grading using online test or scantron.

### **FormSpace**

- Consistent forms and documentation throughout the district
- Utilizes the tiered model of intervention in developing plans
- Interventions and Progress Monitoring are documented for all tier 2 and 3 students.
- Documentation can be uploaded in a .pdf format or developed from the online forms in FormSpace

### **Strive**

- Teachers submit T-TESS goals, document goal completion and view evaluations
- Teachers can get timely feedback from walkthrough evaluations.

# North Zulch ISD

## Response to Intervention (RTI) Tools & Timelines

### Response to Intervention (RtI)

Response to Intervention (RTI) is a framework for systematically determining how well instruction is working and making adjustments to accelerate learning for all. RTI is a “tiered” model, often illustrated as a triangle with several levels. Each level represents a grouping of students whose differing needs are met with more intensive instructional approaches.



#### ***Universal Screeners (Identifies the Who)***

Screening is conducted three times a year to identify or predict students who may be at risk for poor learning outcomes. Universal screening assessments are typically brief, conducted with all students at a grade level, and followed by additional testing or short-term progress monitoring to corroborate students' risk status.

#### ***Progress Monitoring (Is what we are doing working?)***

Progress monitoring short assessments used to assess students' academic performance, to quantify a student rate of improvement or responsiveness to instruction, and to evaluate the effectiveness of instruction.

# **Response to Intervention- Resources**

Interactive mathematics and reading programs for NZISD students in grades PK–8, Algebra I, English I and II. These computer-based programs support students at their skill levels and, most importantly, encourage and enable progress and achievement as students move through the instructional activities. Additionally, these programs are scientifically validated and research based, targeting student growth.

## **Response to Intervention Tools: Universal Screeners and Progress Monitoring**

### **IXL Learning**



<https://www.ixl.com/>

IXL is an end-to-end teaching and learning solution that engages learners in grades Pre-K through 12 with a comprehensive curriculum and personalized recommendations for meeting learning goals in the areas of Math, Language Arts, Science and Social Studies.

### **Renaissance Learning- STAR Assessments**

<https://www.renaissance.com/>








Renaissance STAR Reading- STAR Reading's research based test items give actionable data in four major skill areas: foundational skills, informational text, literature, and language.

Renaissance STAR Math- STAR Math's research based test items meet the highest standards for reliability and validity and give you actionable data in 32 domains.

# Reading Screeners and Intervention Tools

Grade	<p align="center"><b>Screener</b> <u>(identifies the who)</u></p> <p>Screening is conducted three times a year to identify or predict students who may be at risk.</p> <p align="center">Beg. of year (BOY) September Middle of year (MOY) Mid. January End of year (EOY) Mid. April</p> <p align="center"><b>Progress Monitoring</b> Students in Tier 2 &amp; 3 <u>(Is what we are doing working?)</u> Every 3 weeks</p> <p>Progress Monitoring is to assess students' academic performance, to quantify a student rate of improvement or responsiveness to instruction.</p>	<p align="center"><b>Intervention</b></p> <div data-bbox="1149 344 1360 485"> </div> <p>The systematic explicit instruction provided to accelerate growth in an area of identified need. Interventions are provided by both special and general educators, and are based on training, not titles. They are designed to improve performance relative to a specific, measurable goal</p>
<p><b>K-8<sup>th</sup></b></p> <p><b>BOY</b> <b>MOY</b> <b>EOY</b></p>	<div data-bbox="329 873 531 953"> </div> <div data-bbox="623 974 899 1026"> </div>	<div data-bbox="1110 898 1300 974"> </div>
<p><b>9<sup>th</sup>-12<sup>th</sup></b></p> <p><b>BOY</b> <b>MOY</b> <b>EOY</b></p>	<p align="center">STAAR/EOC data Common Assessment/Benchmark data</p> <div data-bbox="518 1176 719 1264"> </div>	<div data-bbox="1110 1142 1300 1218"> </div>

# Math Screeners and Intervention Tools

Grade	<p style="text-align: center;"><b>Screener</b> <u>(identifies the who)</u></p> <p>Screening is conducted three times a year to identify or predict students who may be at risk.</p> <p style="text-align: center;">Beg. of year (BOY) September Middle of year (MOY) Mid. January End of year (EOY) Mid. April</p> <p style="text-align: center;"><b>Progress Monitoring</b> Students in Tier 2 &amp; 3 <u>(Is what we're doing working?)</u></p> <p>Progress Monitoring is to assess students' academic performance, to quantify a student rate of improvement or responsiveness to instruction.</p>	<p style="text-align: center;"><b>Intervention - Protected for RTI</b></p> <div style="text-align: right;">  </div> <p>The systematic and explicit instruction provided to accelerate growth in an area of identified need. Interventions are provided by both special and general educators, and are based on training, not titles. They are designed to improve performance relative to a specific, measurable goal.</p>
<p><b>K– 8<sup>th</sup></b></p> <p><b>BOY</b> <b>MOY</b> <b>EOY</b></p>	<div style="display: flex; justify-content: space-around; align-items: center;">   </div>	
<p><b>9<sup>th</sup>-12<sup>th</sup></b></p> <p><b>BOY</b> <b>MOY</b> <b>EOY</b></p>	<p style="text-align: center;">STAAR/EOC data Common Assessment/Benchmark data</p> <div style="text-align: center;">  </div>	