

North Zulch ISD

Curriculum Guide

2021- 2022



**“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/>



TEKS Resource System

<https://teksresourcesystem.net/>

The TEKS Resource System (TRS) is a systematic K-12 curriculum model designed, maintained, and continuously developed by a collaborative of Education Service Center personnel and exemplary educators from Texas school districts. TRS provides a shared language, structure, and process for curriculum development via an easy-to-use online software delivery system. The curriculum model aligns the written, taught, and tested curriculum and is inclusive of research and best practices mentioned in the works of such notable researchers as Drucker, Deming, English, Wiggins, Erickson, Guskey, Marzano, Feurstein and Jacobs. All curriculum documents, resources and assessment items align to the TEKS.



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 through the use of 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 - enVision MATH by Pearson

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

enVisionMATH is a comprehensive K-5 mathematics curriculum with superior focus, coherence, and rigor ensuring success at every level with problem-based learning, embedded visual learning, and personalization to empower every teacher and student. **enVision**MATH emphasizes conceptual understanding while problem-based learning facilitates productive struggle strengthening students' ability to think mathematically.



K-5 Math - Mentoring Minds- Motivational Math

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

Motivational Math is a resource to support guided practice, group activities, and one-on-one instruction. Each TEKS based unit helps teachers focus on effective teaching of TEKS, lesson planning and time management.

MentoringMinds™
Critical Thinking for Life!



6-8 Math - McGraw-Hill

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

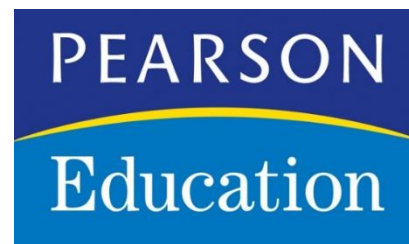
The McGraw-Hill program provides an interactive text that engages students and assists with learning and organization. It personalizes the learning experience for each student by accommodating multiple learning styles where students are prompted to explain their thoughts and processes for solving math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



***High School Math-
Pearson
Algebra I & II, Geometry & Pre-Calculus***

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

Pearson Secondary Mathematics is a comprehensive mathematics curriculum with superior focus, coherence, and rigor, ensuring success at every level with problem-based learning, embedded visual learning, and personalization to empower every teacher and student. The emphasis of the program is conceptual understanding while problem-based learning facilitates productive struggle, which strengthens students' ability to think mathematically.



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.

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.

English Language Arts and Reading (ELAR) Curriculum

The English Language Arts and Reading 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 English Language Arts and Reading 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 English Language Arts & Reading

K-5 English Language Arts & Reading

<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 English Language Arts & Reading

<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://teksresourcesystem.net/>

The TEKS Resource System (TRS) is a systematic K-12 curriculum model designed, maintained, and continuously developed by a collaborative of Education Service Center personnel and exemplary educators from Texas school districts. TRS provides a shared language, structure, and process for curriculum development via an easy-to-use online software delivery system. The curriculum model aligns the written, taught, and tested curriculum and is inclusive of research and best practices mentioned in the works of such notable researchers as Drucker, Deming, English, Wiggins, Erickson, Guskey, Marzano, Feurstein and Jacobs. All curriculum documents, resources and assessment items are aligned to the TEKS.

K-4th Reading

<https://www.readinga-z.com/>

Reading A-Z is an online resource of thousands of downloadable and projectable books and printable teacher materials that cover skills necessary for effective reading instruction. Students practice fluency and then complete comprehension quizzes over books on their reading level.



Renaissance Learning - Accelerated Reader 360 (AR)

<http://www.renaissance.com/about-us>



Accelerated Reader motivates and encourages independent, self-selected reading. AR provides teachers with data to personalize their students' reading.

Students:

- Read books on their instructional level.
- Take comprehension quizzes to earn points.
- Set goals for comprehension, improve level, and increase time spent reading.

K-12th Writing - The Writing Academy

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



The Writing Academy is brain-based and addresses the six traits of writing. Through brain compatible exercises, students learn to write interesting, organized, focused papers with well-developed ideas where their voice comes through to the reader. These concepts are implemented using colors, small chunking, and graphic organizers.

3rd-8th Reading - The Reading Academy

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

Tap and Think Reading

Tap & Think Reading features a method for comprehension and recalling reading selections in which students will learn a tactile-kinesthetic method for playing a movie in their minds as they read. Through the use of games, students learn to decipher reading selections and analyze what has been read. Students learn how to use higher-level thinking strategies to develop suggestions, themes, connections, and ideas.

ENGLISH LANGUAGE ARTS & READING 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.

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 through the use of 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.

6-8th Science and High School Science: IPC, Biology, Chemistry & Physics

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

McGraw-Hill science curriculums are designed for building inquiry and STEM skills and optimized for learning in the classroom or at home, on a laptop, tablet, or using a science textbook. The digital curriculum, virtual labs, hands-on activities, and write-in science textbook develop important critical-thinking skills that prepare students for success in future science courses and in the workplace.



- Project-Based Learning activities
- Thought-provoking questions
- Inquiry-based 5-E lesson cycle
- Hands-on explorations

K-8 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

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.

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.

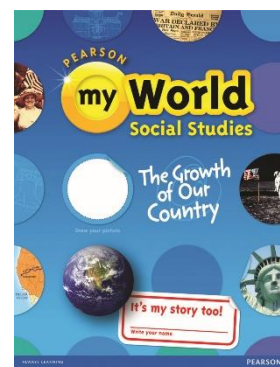
Fundamental Principles:

- Social Studies content instruction focuses on broad concepts, connections, changes over time, and cause and effect.
- Social Studies skills instruction focuses on writing; interactive-notebooking 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 and 9-12 Pearson Social Studies

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

Pearson Social Studies emphasizes learning through storytelling, literacy instruction, and flexible resources. Stories from around the world engage students and help develop thoughtful, literate citizens. Lessons apply inquiry processes, practice reading and writing, and involve collaboration and communication skills. Blended learning experiences include an interactive student work text and digital courseware.



6th-8th McGraw Hill Social Studies

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

McGraw-Hill Social Studies is designed to draw students into rigorous learning experiences to help them understand the world around them. Throughout the middle school curriculum, students will learn about different continents and countries within each of them focusing on economics, society, and government. In addition, students will learn about the history of Texas as well as its geography, history of the native people, and the revolution throughout the statehood. Finally, students will learn about the history of America from its beginning through the Civil War and Reconstruction.



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):

<https://www.quavermusic.com/info/>

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.

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 7-12

<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.

Introduction to Welding (1 credit):

Introduction to welding will introduce welding technology with an emphasis on basic welding laboratory principles and operating procedures. Students will be introduced to three basic welding processes. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. Introduction to Welding will provide students with the knowledge, skills, and technologies required for employment in welding industries. Students will develop knowledge and skills related to welding and apply them to personal career development.

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.

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. To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course 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.

Small Animal Management (0.5 credit):

In Small Animal Management, students will acquire knowledge and skills related to small animals and 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 Leadership (1 credit):

Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

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.

Principles of Nursing Science (1 credit):

The Principles of Nursing Science course introduces students to basic principles of the profession of nursing. The goals/student outcomes for the course include knowledge of the history of nursing, an introduction to nursing theory, professionalism (teamwork, communication, conflict resolution), legal/ethical issues in nursing, infection control, safety, and customer (patient) satisfaction. Skills learned include vital signs and how to document on a graphic record, patient positioning/transferring, bed-making, feeding, and personal protective equipment (PPE).

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.

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.

Pharmacology (1 credit):

The Pharmacology course is designed to study how natural and synthetic chemical agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care. It is an ever changing, growing body of information that continually demands greater amounts of time and education from health care workers.

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

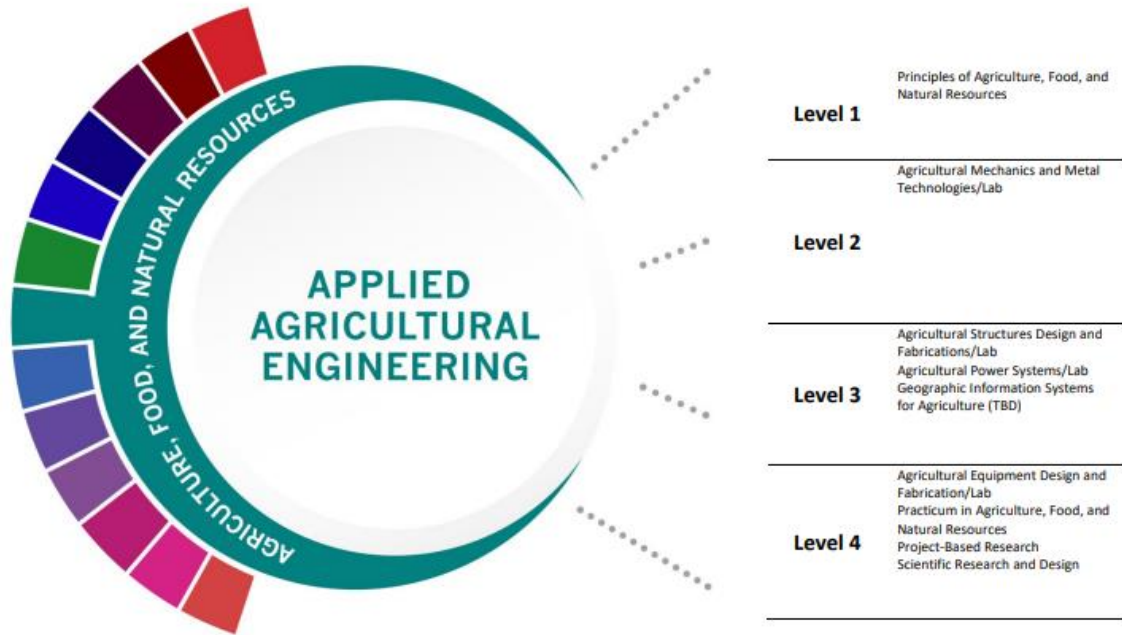
Students may earn one or more endorsements as part of their high school diploma. An endorsement consists of a sequence of courses that are grouped together by interest or occupational skill. They provide students with in-depth knowledge of a subject area or a high-wage, high-skill, and in-demand occupation. 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 endorsement.

	Science, Technology, Engineering & Math	Business & Industry	Arts and Humanities	Public Services	Multidisciplinary
Electives Appropriate for programs of study in the Texas career clusters (7 credits)	<i>Science (5 credits)</i> <i>Math (5 credits)</i>	<i>Agriculture, Food, & Natural Resources</i>	<i>Social Studies (5 credits, including Psychology & 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>

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.



HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
OSHA 30 Hour General Industry	Certified Professional Agronomist	Heavy Equipment Maintenance Technology/ Technician	Agricultural Engineering	Agricultural Engineering
Feedyard Technician in Machinery, Operation, Repair and Maintenance	Certified Reliability Engineer	Agricultural Mechanization, General	Agricultural Mechanization, General	Agricultural Mechanization, General
AWS SENSE Welding Level 1	Certified Irrigation Designer	Small Engine Mechanics and Repair Technology/ Technician		
AWS D1.1 or D9.1 Certification	Fluid Power Mobile Hydraulic Mechanic	Welding Technology/ Welder		

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

Occupations	Median Wage	Annual Openings	% Growth
Outdoor Power Equipment and Other Small Engine Mechanics	\$32,406	366	16%
Welders	\$41,350	6,171	9%
Farm Equipment Mechanics and Service Technicians	\$39,915	304	17%
Mobile Heavy Equipment Mechanics	\$47,299	1,627	16%
Agricultural Engineers	\$64,792	9	13%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Tour a farm products or machinery plant Texas FFA	Earn a welding certification Intern at a farm products or machinery plant FFA Supervised Agriculture Experience (SAE)

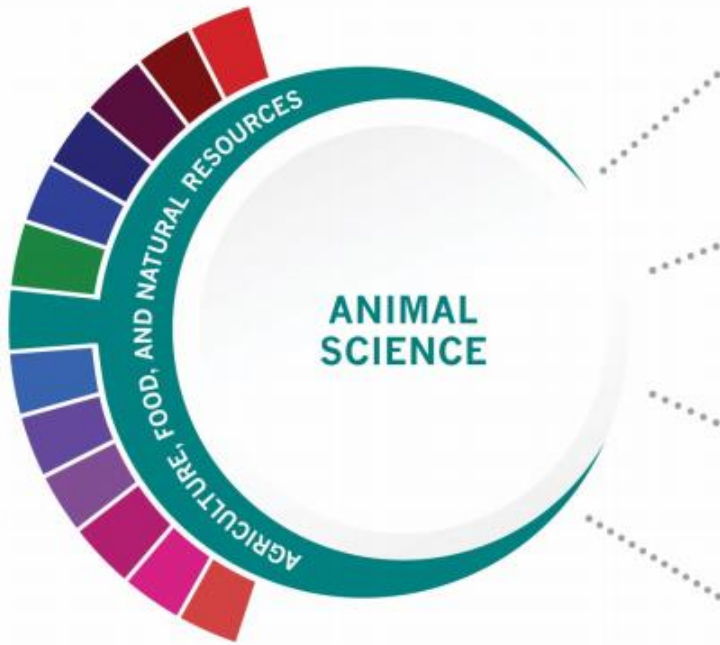
The Applied Agricultural Engineering program of study explores the occupations and educational opportunities associated with applying knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing agricultural products. This program of study may also include exploration into diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.



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 a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Successful completion of the Applied Agricultural Engineering program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020





Level 1	Principles of Agriculture, Food, and Natural Resources
Level 2	Small Animal Management Equine Science
Level 3	Livestock Production/Lab
Level 4	Advanced Animal Science Veterinary Medical Applications/Lab Practicum in Agriculture, Food, and Natural Resources Project-Based Research Scientific Research and Design

HIGH SCHOOL/INDUSTRY CERTIFICATION	CERTIFICATE/LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
Licensed Veterinary Technician	Pet Groomer	Food Science and Technology	Animal Sciences	Genetics
Feedyard Technician in Cattle Care and Handling	Veterinary Technician	Veterinary Studies	Agriculture	Veterinary Medicine
Certified Veterinary Assistant	Licensed Breeder	Biotechnology Laboratory Technician	Biology	Biological and Physical Sciences
		Biology Technician	Zoology/Animal Biology	Biological and Biomedical Sciences

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

Occupations	Median Wage	Annual Openings	% Growth
Animal Breeders	\$39,135	28	9%
Animal Scientists	\$57,533	22	12%
Medical Scientists	\$63,898	435	27%
Veterinarians	\$93,496	294	24%
Zoologists and Wildlife Biologists	\$67,309	45	32%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Texas FFA	Agri-Science Fair 4H Volunteer at a local farm or veterinary office FFA Supervised Agriculture Experience (SAE)

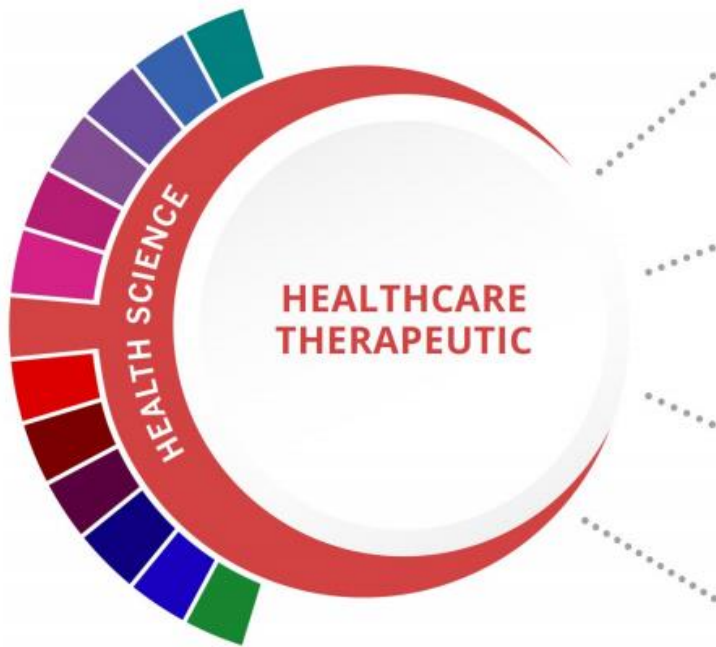
The Animal Science program of study focuses on the science, research, and business of animals and other living organisms. It teaches CTE learners how to apply biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students may also research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.



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 a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Successful completion of the Animal Science program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020





Level 1	Principles of Health Science Principles of Therapeutic Healthcare Introduction to Pharmacy Science Introduction to Dental Science
Level 2	Medical Terminology Dental Anatomy and Physiology (TBD) Pharmacy I (TBD)
Level 3	Anatomy and Physiology Health Science Theory/Health Science Clinical Medical Microbiology Pharmacy II (TBD) Medical Assistant (TBD) Dental Equipment and Procedures (TBD)
Level 4	Pathophysiology Pharmacology Practicum in Health Science

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Registered Dental Assistant	Dental Assistant	Dental Hygienist	Dental Hygienist	Dentist
Certified Patient Care Technician	Surgical Technologist	Medical/ Clinical Assistant		Physician Assistant
Certified Nurse Aide/Assistant	Medical Assistant			Family and General Practitioners
Pharmacy Technician	Pharmacy Aides			Pharmacist

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

Occupations	Median Wage	Annual Openings	% Growth
Medical Assistants	\$29,598	8,862	30%
Surgical Technologists	\$45,032	1,150	20%
Dental Hygienists	\$73,507	1,353	38%
Physicians and Surgeons	\$213,071	1,151	30%
Dental Assistants	\$34,840	4,422	31%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
SkillsUSA Health Occupation Students of America (HOSA)	Volunteer at a community wellness center, hospital, assisted living, or nursing home.

The Healthcare Therapeutic program of study introduces students to occupations and educational opportunities related to diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study also includes an introduction to the opportunities associated with providing treatment and counsel to patients as well as rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.



The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.

Successful completion of the Healthcare Therapeutic program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020





Level 1

Principles of Human Services
Professional Communications
Interpersonal Studies
Dollars and Sense
Principles of Community Services

Level 2

Lifetime Nutrition and Wellness
Human Growth and Development
Child Development
Social and Community Services
(TBD)

Level 3

Counseling and Mental Health
Family and Community Services

Level 4

Practicum in Human Services
Practicum in Entrepreneurship
(TBD)
Project-Based Research
Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Community Health Worker	Human Development and Family Studies	Human Development and Family Studies	Human Development and Family Studies	Human Development and Family Studies
Certified Associate in Project Management	Community Health Services/Liaison/Counseling	Human Services/Sciences, General	Human Services/Sciences, General	Marriage and Family Therapy/Counseling
	Distance Credentialed Counselor	Family and Consumer Sciences	Family and Consumer Sciences	Human Services/Sciences
	Educator Certification in Family and Consumer Sciences	Community Health Services	Child and Family Services	Family Studies

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

Occupations	Median Wage	Annual Openings	% Growth
Child, Family, and School Social Workers	\$41,350	2,221	17%
Social and Community Services Managers	\$65,146	608	33%
Marriage and Family Therapists	\$42,266	217	35%
Social and Human Service Assistants	\$32,448	2,822	25%
Mental Health and Substance Abuse and Behavioral Disorder Counselors	\$42,120	576	39%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
American Association of Family and Consumer Sciences, Family, Career and Community Leaders of America	Volunteer at a community center; intern for a community non-profit organization

The Family and Community Services program of study introduces students to knowledge and skills related to social services, including child and human development and consumer sciences. CTE learners may learn about or practice managing social and community services or teaching family and consumer sciences. Students may follow career paths in social work or therapy for children, families, or school communities.



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.

Successful completion of the Family and Community Services program of study will fulfill requirements of the Public Service Endorsement. Revised - July 2020



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/TAFFSA 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.

7th - 8th Grade English Language Arts and Reading:

English Language Arts and Reading grade 7 and 8 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.

7th - 8th Grade English Language Arts and Reading-Honors:

Honors English Language Arts and Reading grade 7 and 8 covers the core curriculum of ELAR 7 and ELAR 8 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.

7th 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.

7th 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.

8th 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.

8th Grade Math-Honors:

The primary focus of 8th grade honors 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. Both concrete and theoretical methods of problem solving are taught to encourage higher thinking skills. Students will be expected to solve problems with and without a graphing calculator. This is an advanced academic course and requires extensive out-of-class commitment. It is recommended that students who chose to enroll in this course score at or above “meets expectations” on the 7th grade STAAR test.

8th 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.

7th 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.

7th 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.

8th 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 science are matter and energy, force and matter, earth and space science, and organisms and environment.

8th 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.

7th 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.

7th 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.

8th 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.

8th 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.

Teen Leadership (7th grade):

Teen Leadership is a program in which students develop leadership, professional, and business skills. Students learn to develop a healthy self-concept, healthy relationships, and learn to understand the concept of personal responsibility. Students will develop an understanding of emotional intelligence and the skills it measures, which include self-awareness, self-control, self-motivation, and social skills.

STEM (Science, Technology, Engineering, & Math) (7th & 8th grade):

The STEM acronym stands for science, technology, engineering, and mathematics. These academic disciplines rely heavily upon one another and integrate in the professional and academic world. Students will be engaged in hands-on activities geared towards combining each of the STEM disciplines. Creativity and collaboration will be encouraged as students solve problems.

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.

Spanish I (1 credit):

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

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.

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.

Big Day in Pre-K

<https://www.hmhco.com/programs/big-day-for-prek>



Based on years of research that demonstrate the importance of teacher-student interactions, immediate and regular access to the best literature available, and the need for social-emotional development instruction, *Big Day for Pre-K* offers teachers a thematic and integrated approach to guiding our youngest learners. Organized around eight themes that grow in scope as children become more aware of their surroundings, the program introduces children to math, literacy, science, and the arts in a way that feels like play and inspires joyful engagement.

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.

Credit Recovery

Edgenuity

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



Edgenuity is an online learning system used for Credit Recovery and Virtual Initial Credit in very limited cases. Edgenuity courses deliver an online, self-paced format, and are mastery-based. This means that students must demonstrate mastery of the course content in order to earn the associated credit.

- Increase student engagement with courses that incorporate video, interactive activities, immediate feedback and intuitive navigation.
- Improve content retention through lessons built on instructional design best practices.
- Aligned to TEKS

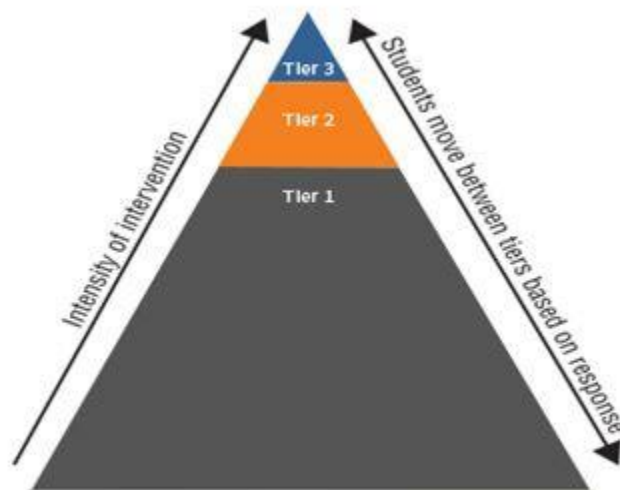
North Zulch ISD

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 Reading Tools Reading Programs- Screeners and Progress Monitoring

Istation

<http://www.istation.com/>



Imagine Station (Istation) uses an innovative PK-8th grade reading program to immerse students in an engaging and interactive environment. Students experience richly animated, game-like educational technology that adapts to their learning needs in the area of English Language Arts and Reading.

Renaissance Learning-STAR Reading

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



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

Response to Intervention Math Tools

Math Programs - Screeners and Progress Monitoring

Renaissance STAR Math

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



Renaissance Learning 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.






Istation

<http://www.istation.com/>








Imagine Station (Istation) uses an innovative PK-8th grade mathematics program to immerse students in an engaging and interactive environment. Students experience richly animated, game-like educational technology that adapts to their learning needs in the area of mathematics.

Reading Screeners and Intervention Tools

Grade	<p>Screener <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>Beg. of year (BOY) September Middle of year (MOY) Mid. January End of year (EOY) Mid. April</p> <p>Progress Monitoring Students in Tier 2 & 3 <u>(Is what we're 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>Intervention</p>  <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>K-8th BOY MOY EOY</p>	 	
<p>9th-12th</p>	<p>STAAR/EOC data Common Assessment/Benchmark data</p> 	<p>Motivation Reading STAAR Reading STAAR Master</p>

Math Screeners and Intervention Tools

Grade	<p> Screener <i>(identifies the who)</i></p> <p>Screening is conducted three times a year to identify or predict students who may be at risk.</p> <p>Beg. of year (BOY) September Middle of year (MOY) Mid. January End of year (EOY) Mid. April</p> <p>Progress Monitoring Students in Tier 2 & 3 <i>(Is what we're doing working?)</i></p> <p>Progress Monitoring is to assess students' academic performance, to quantify a student rate of improvement or responsiveness to instruction.</p>	<p>Intervention - Protected for RTI</p>  <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>K– 8th</p> <p>BOY MOY EOY</p>	 	
<p>9th-12th</p> <p>BOY MOY EOY</p>		<p>Motivation Math STAAR Master STAAR Math</p>