



**LONE OAK HIGH SCHOOL
COURSE PLANNING GUIDE
2024 - 2025**

DEDICATED TO
Excellence
IN EDUCATION



WELCOME

TO LONE OAK HIGH SCHOOL



Dear Parents and Students:

As you examine this very important document, use this as an opportunity to begin mapping out your future. Do not think about next year rather think about where you want to be in five years. Our district prides itself on providing an academically rigorous and challenging program for all students. Lone Oak ISD has a strong culture of helping students prepare for life after high school including college, career and military service. Our students aspire to academic excellence and personal best, while positioning themselves for success in college and careers beyond.

Each decision you make now can affect the options you will have later. Lone Oak ISD encourages students to develop a personal pathway to post high school success by developing a challenging personal graduation plan that keeps your options open. Research shows that students who take more challenging courses in math, science, and the humanities, participate in advanced programs, and earn college credit while in high school are more likely to be successful in college and in their careers. For that reason, it is important to plan a challenging academic program and strongly pursue your interests. Understanding the rich array of courses available to you and the planning required is the first step in making these important decisions.

- **DEVELOPING A 4-YEAR PLAN** – To ensure all students complete a challenging course of study and reach their potential, students begin their high school 4-year plan during their 8th grade year. In high school, all students will meet individually with their counselor annually to update their 4-Year plan as well as plan and prepare for life after high school.
- **PROVIDING AN EDGE** – An important goal at each of our high schools is to set our graduates apart from students in other districts. We want to give you an edge. Opportunities include:
 - **AP and Advanced Programs** – A rich array of internationally recognized college-preparatory courses in math, science, language, social sciences, arts and technology.
 - **Dual Credit Program** – Allows high school students the opportunity to earn college credit while in high school.
 - **Program of Study** – Based on their interests, aptitudes and goals, students choose specific areas of study to create a program combining academically challenging courses and electives in their areas of interest. This strategy yields more in-depth knowledge and interrelated skills in their area of interest and heightened preparation to continue their study in this field in post-secondary education.

Course selections determine how the master schedule is developed. Because the choices you make are extremely important to the planning of our school year, we ask that you honor your selections. Effort will be made to schedule you with your course choices, though some conflicts are unavoidable. List alternative electives as you complete your course selections.

In Lone Oak ISD, we want students to make informed decisions about course selections and to realize the impact these decisions have on their futures. The faculty and staff look forward to the coming year of opportunities and remain committed to excellence.

Sincerely,

Steve Morrow
High School Principal
Lone Oak Independent School District



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Lone Oak High School

GRADUATION REQUIREMENTS

All students will graduate on the Foundation High School Program with a Multidisciplinary endorsement, also earning the Distinguished Level of Achievement. Students will also have the opportunity to earn additional endorsements through their programs of study selections.

A student may elect to graduate without an endorsement or distinction under the high school foundation program with school administrator approval after the student's sophomore year. The student and the student's parent or guardian must be advised by the school counselor of the benefits of graduating with one or more endorsements and the student's parent or guardian must file written permission with the high school allowing the student to graduate without an endorsement.

Distinguished Level of Achievement + Endorsement	
28 CREDITS	
English/Language Art.....	4 credits ELA I, II, III, one advanced English credit
Math.....	4 credits Algebra I, Geometry, Algebra II, one advanced math credit
Science.....	4 credits Biology; Chemistry; Physics; one advanced science credit
Social Studies.....	4 credits World Geography, World History; U.S. History; Government (.5 credit) and Economics (.5 credit)
Languages Other Than English.....	2 credits Spanish I & II
Physical Education.....	1 credit
Fine Arts.....	1 credit
Electives	7 credits
*Fine Arts or P.E credit may be earned in MS for HS credit.	

Honors, AP, and Dual Credit courses may be substituted for requirements in appropriate areas; check with your counselor for available options.

*The Distinguished Level of Achievement will be a designation on the final transcript and diploma. A student must earn the Distinguished Level of Achievement in order to be eligible for automatic top 10% admission to Texas universities. A student may earn a distinguished level of achievement by successfully completing:

- A total of four credits in mathematics, which must include Algebra II
- A total of four credits in science
- The remaining curriculum requirements
- The curriculum requirements for at least one endorsement

**Please see specific graduation requirement options for each endorsement and program.

ENDORSEMENTS

AND PROGRAM OPPORTUNITIES

An endorsement can be earned by taking additional courses in Career and Technical Education (CTE) or by taking additional non-CTE courses specified within the endorsement requirements.

LOISD offers courses to meet endorsements in all areas.

STEM	BUSINESS & INDUSTRY	PUBLIC SERVICE	ARTS & HUMANITIES	MULTI-DISCIPLINARY
Lone Oak Options				
Math Science Engineering Foundations*	AAVTC - Graphic Design & Interactive Media* Agriculture - Animal Science* Agriculture - Welding* Business Management* Entrepreneurship* Transportation - Aviation Maintenance*	Family & Community Services* Health Science - Exercise Science, Wellness, & Restoration* Health Science - Diagnostic & Therapeutic Services*	Fine Arts Languages Other Than English Social Studies	Four credits in each of the four foundation subject areas to include English IV and Chemistry and/or Physics. Four credits in AP or dual credit/concurrent enrollment selected from English, mathematics, science, social studies, LOTE, and Fine Arts

*Notes a CTE Program of Study

**Satisfactory performance of approaches, meets, or masters, on the applicable assessments will be required for graduation, unless otherwise waived or substituted as allowed by state law and rules.

**State Assessments Required for Graduation	Performance Acknowledgments	Questions
English I; English II; Algebra I; Biology, U.S. History	Outstanding performance: SAT®, ACT®, PSAT®, AP®, Dual Credit, Business/Industry Certifications, Biliteracy Seal	Contact your student's counselor, or visit https://www.loneoakisd.net/

4-YEAR Graduation Plans

To help you to map out your plan and to keep track of progress, we've provided you with a typical 4 year plan. This working document should be used to guide you as you navigate the course selection catalog and learn more about the Distinguished Plan, endorsements & programs of study, performance acknowledgements, advanced academics, college readiness and much more.

ON-LEVEL Course Suggested Planning

	9th Grade	10th Grade	11th Grade	12th Grade
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Pre-Calculus
Science	Biology	Chemistry	Physics	A&P OR Forensic Science
Social Studies	World Geography	World History	U.S. History	Government & Economics
Program of Study CTE Courses	CTE Course 1	CTE Course 2	CTE Course 3	CTE Course 4
LOTE or Electives	Spanish I OR German I	Spanish II OR German II	Elective	Elective
PE equivalent or Elective	Athletics /Band or PE	Athletics /Band or Elective	Athletics /Band or Elective	Athletics /Band or Elective
Electives	Fine Art or Elective (If Fine Art credit earned in MS)	Elective	Elective	Elective

4-YEAR Graduation Plans

To help you to map out your plan and to keep track of progress, we've provided you with a typical 4 year plan. This working document should be used to guide you as you navigate the course selection catalog and learn more about the Distinguished Plan, endorsements & programs of study, performance acknowledgements, advanced academics, college readiness and much more

ADVANCED Course Suggested Planning

	9th Grade	10th Grade	11th Grade	12th Grade
English	Honors English I	Honors English II	AP English III OR Dual Credit English III	English IV OR Dual Credit English IV
Math	Honors Algebra I	Honors Geometry AND Honors Algebra II	Honors Pre-Calculus	AP Calculus AB OR Dual Credit Math
Science	Honors Biology	Honors Chemistry	AP Physics OR AP Biology	AP Physics OR AP Biology
Social Studies	Honors World Geography	AP World History	AP US History OR Dual Credit History 1301 & 1302	AP Government AND AP Economics OR <i>Dual Credit Option</i>
Program of Study CTE Courses	CTE Course 1	CTE Course 2	CTE Course 3	CTE Course 4
LOTE or Electives	Spanish I OR German I	Spanish II OR German II	Elective	Elective
PE equivalent or Elective	Athletics /Band or PE	Athletics /Band or Elective	Athletics /Band or Elective	Athletics /Band or Elective
Electives	Fine Art or Elective (If Fine Art credit earned in MS)	Replaced with additional math credit	Elective	Elective

GRADUATION INFORMATION

This Course Selection Guide provides information and guidance to students and parents as they select courses, consider graduation requirements, and locate relevant information in planning for enrollment each year.

GRADUATION REQUIREMENTS

Lone Oak ISD requires 28 credits for graduation on the Foundation Plan with an endorsement. The credits required to graduate on the Foundation Plan without an endorsement is 22 credits.

CLASSIFICATION CREDIT:

Students are classified at the beginning of the year, according to the number of credits they have earned:

- Freshman promotion from 8th grade
- Sophomore 6 to 11.5 credits
- Junior 12 to 18.5 credits
- Senior 18 plus credits

ACADEMIC ACHIEVEMENT - CLASS RANK / HIGHEST RANKING STUDENT

Valedictorian/Salutatorian – The valedictory honors will be given to the student making the highest weighted average of grade points during their four years of high school study. Salutatory honors will be awarded to the student making the second highest weighted average of grade points during their four years of high school study. A chart follows as to how grade points are determined. These honors are determined at the end of the fourth nine week reporting period of the senior year.

Eligibility: To be eligible for valedictory or salutatory honors, a student must be enrolled in the district high school for the four semesters of their junior and senior years and have had continuous enrollment until graduation. Eligible students must take at least four academic courses each of the four years he or she has been in high school. Eligible students must have earned distinguished achievement under HB 5. Students who transfer from other accredited schools are eligible for academic honors at Lone Oak High School provided they meet the enrollment requirements. Students who choose to be an early graduate are not eligible for valedictory or salutatory honors.

Honor Graduate – Those graduating seniors who are in the top 25% will be designated Honor Graduates.

Eligibility: In order to be an honor graduate, the student does not have to meet the enrollment requirements but must have been enrolled in at least four academic courses each of the four years he or she has been in high school. Students who transfer from other accredited schools are eligible. Early graduates are also eligible.

GRADUATION INFORMATION

The following grade points will be used to determine class rank:

Grade	Regular	Weighted	Advanced
97-100	13	16	19
94-96	12	15	18
90-93	11	14	17
87-89	10	13	16
84-86	9	12	15
80-83	8	11	14
77-79	7	10	13
75-76	6	9	12
72-74	5	8	11
70-71	4	7	10
Below 70	0	0	0

Weighted Classes shall include: All Honors classes, Anatomy & Physiology and PreCalculus.

Advanced Classes shall include: All AP classes and dual credit college classes (pre-approved and designated for course credit/class rank.)

GRADUATION INFORMATION

Class Rank and GPA Exceptions

Local credit courses, summer school, correspondence classes or credit by exams will not be used in calculating grade point average. Local credit courses taken at the middle school will not count towards credit earned at the high school. Students will be eligible to earn up to 30 hours of dual credit to apply towards class rank.

Conversion of Letter Grades:

Lone Oak High School will use the following conversion chart for transferring letter grades to numeric grades:

A+ = 98	B+ = 88	C+ = 78
A = 95	B = 85	C = 75
A- = 92	B- = 82	C- = 72

Dual Credit College grades that are letter grades will be converted to a numeric grade using the chart below, unless a numeric grade is given by the instructor.

A = 97 B = 87 C = 77

ADVANCED PLACEMENT (AP)

The Advanced Placement Program taught at Lone Oak High School allows students to participate in a college-level course and possibly earn college credit while in high school. Students are given the opportunity to show mastery in college-level courses by taking the Advanced Placement exam in May of each school year. This “academic bridge” helps smooth the transition from high school to college. The primary goals of the Advanced Placement Program are to enrich the secondary school experience of students ready to apply themselves to college-level courses and to provide the means by which colleges may grant credit or placement or both, to students with satisfactory Advanced Placement scores.

Additionally, students who have taken an AP exam may receive college credit while still in high school, saving both time and money. Credit on AP exams can save up to \$1,500 in college tuition alone and/or count as credit for one or more college courses. Students and parents should always check with the college of interest to ensure that the college accepts Advanced Placement exams for credit and the scores they require for credit.

GRADUATION INFORMATION

Advanced Placement Exams

AP exams are structured to measure three areas—depth of knowledge, completeness of thought, and synthesis of ideas. Exams are graded on a five-point scale with credit usually given for scores of three or higher. The score requirements and number of college credit hours awarded or placement credit awarded varies among universities and colleges.

AP exams are given in May according to the College Board exam schedule. The cost is approximately \$98.00 and is determined each year by The College Board. Students who qualify for free and reduced lunch will qualify for a reduced fee. See our Honors/AP local policy.

Guidelines for Advanced Placement Courses

1. Once a student is enrolled in an AP course, they can only drop in the first two weeks of school or at the end of the first semester.
2. Enrollment in AP courses is open to all students that meet course prerequisites outlined in the high school course guide.
3. Students will be required to take the end of course AP exam. Students will pay for each exam taken. The district will reimburse an exam fee if a student scores a 3 or higher on the exam.
4. If a student fails to take the test, the registration fee is non-refundable. The transcript will reflect credit for taking the AP class regardless of the score on the exam.
5. AP classes receive advanced points towards class rank and GPA. Refer to the Academic Achievement section of this catalog.

Honors Courses offered

Honors courses are offered in the core content areas. Honors Classes do not have College Board exams but students in each class will be required to take and pass the State of Texas STAAR EOC exam for each subject. Honors courses receive weighted points towards class rank and GPA.

All Advanced Placement and Honors courses will have summer assignments the summer prior to the course.

Course Descriptions



ENGLISH Courses

Core Curriculum Course Offerings

GRADE	ON-LEVEL COURSE SEQUENCE	ADVANCED COURSE SEQUENCE
9th Grade	English I (1 credit)	Honors English I (1 credit)
10th Grade	English II (1 credit)	Honors English II (1 credit)
11th Grade	English III (1 credit)	AP English III (1 credit) OR Dual Credit English 1301/1302 (1 credit)
12th Grade	English IV (1 credit)	AP English IV OR Dual Credit English 1301/1302 (1 credit)
Other course offerings	College Prep English (1 credit) Creative Writing (0.5 credit) Journalism (0.5 credit) Advanced Journalism (Yearbook) (1 credit)	

ENGLISH Course Descriptions

Course	Description
English I	<p>Grade Placement: 9 Credit: 1</p> <p>This course focuses on the fundamental language skills of reading, writing, speaking, listening, thinking, and presenting. Students will read multiple genres throughout the course and write both literary and informational compositions. The development of critical reading and writing skills is emphasized during instruction.</p> <p><i>*Honors is available and is a weighted class towards class rank.</i></p>
English II	<p>Grade Placement: 10 Credit: 1</p> <p>This course emphasizes critical reading and writing skills. Students read extensively in multiple genres from world literature including short stories, dramas, novels, and poetry, in addition to informational texts. This course facilitates opportunities for students to write a variety of literary, expository, and persuasive compositions for increasing length and complexity.</p> <p><i>*Honors is available and is a weighted class towards class rank.</i></p>
English III	<p>Grade Placement: 11 Credit: 1</p> <p>This course is a study of composition, research, grammar, and vocabulary. Students write a comprehensive research paper their junior year as well as several literary-based essays. Since English III builds upon skills attained in English II, the students are expected to have a proficiency in reading, writing, and critical thinking skills. The students utilize technology throughout the year.</p>
English IV	<p>Grade Placement: 12 Credit: 1</p> <p>In this course students analyze American and British literature as it reflects social perspective and historical significance by continuing to use language for expressive, expository, argumentative, and literary purposes. The emphasis in English IV is placed on critical analysis of texts through reading, writing, speaking, listening, and using media.</p>
AP English Language & Composition	<p>Grade Placement: 11-12 Credit: 1</p> <p>This course combines higher-level thinking skills with independent reading and study. Emphasis is placed on Advanced Placement preparation work, including the critical study of rhetoric and literature, analysis of style, research, and timed essay writings. Students are expected to take the AP English Language and Composition exam upon course completion.</p>
AP English Literature & Composition	<p>Grade Placement: 11-12 Credit: 1</p> <p>Learn about the elements of argument and composition as you develop your critical-reading and writing skills. You'll read and analyze nonfiction works from various periods and write essays with different aims: for example, to explain an idea, argue a point, or persuade your reader of something.</p>
Dual Credit 1301/1302	<p>Grade Placement: 11-12 Credit: 1</p> <p>In this course students analyze American and British literature as it reflects social perspective and historical significance by continuing to use language for expressive, expository, argumentative, and literary purposes. The emphasis in English IV is placed on critical analysis of texts through reading, writing, speaking, listening, and using media.</p> <p><i>*Course offered in conjunction with Paris Junior College.</i></p>

ENGLISH Course Descriptions

Course	Description
<p>Creative Writing</p>	<p>Grade Placement: 9-12 Credit: 0.5 This rigorous composition course requires high school students to demonstrate their skills in such forms of writing as essays, short stories, poetry, and drama.</p>
<p>Dual Credit Speech 1315</p>	<p>Grade Placement: 12 Credit: 1 Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. <i>*Course offered in conjunction with Paris Junior College.</i></p>
<p>Journalism</p>	<p>Grade Placement: 9-12 Credit: 0.5 This course reviews the history of mass print media as well as its contemporary role in the United States. Students will analyze and compose journalistic writing and prepare materials necessary for newspaper and yearbook design. It is recommended that students earn an average grade or higher in their prior English course and have strong typing skills. Typing skills are recommended but not required.</p>
<p>Advanced Journalism (Yearbook)</p>	<p>Grade Placement: 10-12 Credit: 1 This course continues the students' study of mass communications while applying their skills to the processes of writing, designing, and editing a school yearbook. Typing skills are suggested but not required.</p>
<p>College Prep English</p>	<p>Grade Placement: 12 Credit: 1 Students will learn to investigate academic texts, construct supported interpretations and arguments for an authentic audience, and acquire academic habits of thought. Reading instruction will focus on developing critical reading skills for comprehension, interpretation, and analysis. In writing, students will develop skills through composing with specific purpose, situation, genre, and audience in mind. Students will write a variety of effective formal and informal texts. To learn to integrate reading and writing, students will use an inquiry approach to analyze, synthesize, and make value judgments regarding text and writing. This course is designed to prepare students for college-level reading and writing intensive courses. Successful completion of this course, as defined by the memorandum of understanding (MOU) with the partnering institution(s), grants the student an exemption to TSI requirements for reading and writing at the partnering institution(s)</p>

MATHEMATICS Courses

Core Curriculum Course Offerings

GRADE	ON-LEVEL COURSE SEQUENCE	ADVANCED COURSE SEQUENCE
9th Grade	Algebra I (1 credit)	Honors Algebra I (1 credit)
10th Grade	Geometry (1 credit)	Honors Geometry AND Honors Algebra II (1 credit)
11th Grade	Algebra II (1 credit)	Honors Pre-Calculus (1 credit)
12th Grade	Pre-Calculus (1 credit)	AP Calculus AB (1 credit)
Other course offerings	College Prep Math (1 credit) Dual Credit College Algebra Math 1314 AND Math 2312 (1 credit) Financial Mathematics (1 credit)	

MATHEMATICS Course Descriptions

Course	Description
Algebra I	<p>Grade Placement: 9 Credit: 1</p> <p>This course emphasizes the development of algebraic skills and concepts necessary for geometry and higher level math courses. The course uses algebraic skills in a wide range of problem-solving situations, including the concept of function. Other topics include properties of real numbers, solution and evaluation of equalities and inequalities, graphing of linear equations and solution sets, basic operations with polynomials, solving quadratic equations and systems of equations, use of exponents, and introductory topics from statistics and probability.</p> <p><i>*Honors is available and is a weighted class towards class rank.</i></p>
Geometry	<p>Grade Placement: 10 Credit: 1</p> <p>Students will explore real life problems and apply principles of algebra and geometry to critically and analytically find solutions. Tools of Geometry including compass, protractor, and computer software such as Geometer Sketchpad will be applied to develop concepts. The course content includes facts regarding points, lines, planes, angles, triangles, circles, polygons, polyhedrons, transformations, classical construction, inductive and deductive reasoning, introduction to proof, congruence, area, perimeter, surface area, volume, and similarity with an introduction to trigonometry and analytic geometry</p> <p><i>*Honors may be available and is a weighted class towards class rank.</i></p>
Algebra II	<p>Grade Placement: 11 Credit: 1</p> <p>An extension of Algebra I and Geometry. Algebra II includes the concepts learned in those courses along with quadratic functions, radical functions, exponential functions, and logarithmic functions that are concepts tested on SAT and ACT. This course is a prerequisite to Precalculus.</p> <p><i>*Honors may be available and is a weighted class towards class rank.</i></p>
Pre-Calculus	<p>Grade Placement: 11-12 Credit: 1</p> <p>An extension of Alg. II and Geometry concepts along with learning Trigonometry concepts, the conic section, and series and sequences. The concepts learned in this course will prepare you for the Calculus course. The concepts learned in this course will also be tested on the SAT and ACT. This course is a prerequisite for Calculus.</p> <p><i>*PreCalculus is a weighted class towards class rank.</i></p>
AP Calculus AB	<p>Grade Placement: 12 Credit: 1</p> <p>Building enduring mathematical understanding requires understanding the why and how of mathematics in addition to mastering the necessary procedures and skills. To foster this deeper level of learning, AP Calculus AB is designed to develop mathematical knowledge conceptually, guiding you to connect topics and representations throughout the course and to apply strategies and techniques to accurately solve diverse types of problems.</p> <p><i>*AP Calculus is an advanced weighted class towards class rank.</i></p>

MATHEMATICS Course Descriptions

Course	Description
Financial Mathematics	<p>Grade Placement: 12 Credit: 1</p> <p>Financial Mathematics is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. Financial Mathematics will integrate career and postsecondary education planning into financial decision making.</p>
College Prep Mathematics	<p>Grade Placement: 12 Credit: 1</p> <p>Students will study linear, quadratic, polynomial, rational and radical expressions, equations, and functions as well as probability and statistics. College Prep Math is designed to help students meet college entrance requirements (TSI testing) and to be ready for entry-level college math coursework. Students taking this course are strongly encouraged to take the TSI upon course completion.</p>
Math Models	<p>Grade Placement: 10-12 Credit: 1</p> <p>This course uses a variety of models in algebra, probability, statistics, and geometry, to solve a wide range of real-life applications problems involving money, data, chance, patterns, music, design, and science. Students will be placed in this course if necessary.</p>
Dual Credit College Algebra (Math 1314) and Math 2312 OR Math 1342	<p>Grade Placement: 12 Credit: 1</p> <p>Students will be able to earn 6 college hours. Both classes must be taken to equal a 4th math credit for graduation. Grade 12 only* Dual credit is available and is an advanced class towards class rank. Math 2312 can be substituted with Math 1342 (statistics).</p> <p>*Course offered in conjunction with Paris Junior College.</p>

SCIENCE Courses

Core Curriculum Course Offerings

GRADE	ON-LEVEL COURSE SEQUENCE	ADVANCED COURSE SEQUENCE
9th Grade	Biology (1 credit)	Honors Biology (1 credit)
10th Grade	Chemistry (1 credit)	Honors Chemistry (1 credit)
11th Grade	Physics (1 credit)	AP Physics (1 credit) OR AP Biology (1 credit)
12th Grade	Advanced Animal Science OR Forensic Science (1 credit)	Anatomy and Physiology OR AP Biology (1 credit)

SCIENCE Course Descriptions

Course	Description
Biology	<p>Grade Placement: 9 Credit:1</p> <p>This course is designed to teach the student learner about the concepts, principles, and theories about the natural environment around them. As a participant in this course you will learn about living things. We discover the answers to questions about living things through a variety of different activities such as laboratory experiments, internet (technology) research, projects and reports. The textbook used for the course is very informative and complete and is used extensively. We will also learn how to apply Biology concepts and use critical thinking skills throughout the year to help all students be successful on the TAKS test as a sophomore and junior.</p> <p><i>*Honors is available and is a weighted class towards class rank.</i></p>
Chemistry	<p>Grade Placement: 10 Credit: 1</p> <p>Chemistry is the study of matter and all the changes that it undergoes. IT is necessary to understand some chemistry for all branches of science. The class has many math concepts included. Chemistry is an upper level science class. The problem solving skills learned in chemistry can apply to everyday life situations, test taking abilities, and college.</p> <p><i>*Honors may be available and is a weighted class towards class rank.</i></p>
Physics	<p>Grade Placement: 11 Credit: 1</p> <p>Physics is the study of movement. It is the study of movement of all things, from atomic particles to waves (light, sound, and mechanical waves). Physics is an upper level science class. Its applications can be spread out into everyday life occurrences.</p>
Anatomy & Physiology	<p>Grade Placement: 11-12 Credit: 1</p> <p>Prerequisite: Biology and a second science credit. Recommended Prerequisite: A course from the Health and Science Career Cluster.</p> <p>The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.</p> <p><i>*This class receives weighted points for class rank.</i></p>

SCIENCE Course Descriptions

Course	Description
Forensic Science	<p>Grade Placement: 11-12 Credit: 1 Prerequisites: Biology and Chemistry</p> <p>Forensic Science is a course that introduces students to the application of science to connect a violation of law to a specific criminal, criminal act, or behavior and victim. Students will learn terminology and procedures related to the search and examination of physical evidence in criminal cases as they are performed in a typical crime laboratory. Using scientific methods, students will collect and analyze evidence such as fingerprints, bodily fluids, hairs, fibers, paint, glass, and cartridge cases. Students will also learn the history and the legal aspects as they relate to each discipline of forensic science.</p>
Advanced Animal Science	<p>Grade Placement: 11-12 Credit: 1</p> <p>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 prepare for careers in the field of animal science, students must 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.</p>
AP Biology	<p>Grade Placement: 11-12 Credit: 1</p> <p>AP Biology is a college-level course designed to develop advanced inquiry and reasoning skills. Key concepts (Evolution, Cellular Processes-Energy and Communication, Genetics and Information Transfer, and Interactions) are organized around underlying principles encompassing core scientific principles and theories.</p> <p><i>*This class receives weighted points for class rank.</i></p>
AP Physics	<p>Grade Placement: 11-12 Credit: 1</p> <p>AP Physics is a college-level course. Learn about the foundational principles of physics as you explore Newtonian mechanics; work, energy, and power; mechanical waves and sound; and introductory, simple circuits. You'll do hands-on laboratory work to investigate phenomena.</p> <p><i>*This class receives weighted points for class rank.</i></p>

SOCIAL STUDIES Courses

Core Curriculum Course Offerings

GRADE	ON-LEVEL COURSE SEQUENCE	ADVANCED COURSE SEQUENCE
9th Grade	World Geography (1 credit)	Honors World Geography (1 credit)
10th Grade	World History (1 credit)	AP World History (1 credit)
11th Grade	U.S. History (1 credit)	AP US History OR Dual Credit History 1301 & 1302 (1 credit)
12th Grade	Government (0.5 credit) AND Economics (0.5 credit)	AP Government/Economics OR Dual Credit Government/Economics (1 credit)
Other course offerings	Psychology (0.5 credit) Sociology (0.5 credit) AP Psychology (0.5 credit)	

SOCIAL STUDIES Course Descriptions

Course	Description
World Geography	<p>Grade Placement: 9 Credit: 1</p> <p>World Geography is organized around 6 essential elements. The essential elements are: The world in spatial terms, places and regions, physical systems, human systems, environment and society and the use of geography. *Honors is available and is a weighted class towards class rank.</p>
World History	<p>Grade Placement: 10 Credit: 1</p> <p>This world history class covers the entire span of human history. The course begins by discussing the first known civilizations and ends with present day current events. Emphasis will be placed on understanding broad themes and concepts about the history of the world, including economics and technology, political and social systems, religions and value systems, art and literature, and the impact of the individual. *Honors is available and is a weighted class towards class rank.</p>
AP World History	<p>Grade Placement: 10-12 Credit 1</p> <p>Study the cultural, economic, political, and social developments that have shaped the world from c. 1200 CE to the present. You'll analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. <i>*This class receives weighted points for class rank.</i></p>
U.S. History	<p>Grade Placement: 11-12 Credit: 1</p> <p>This course traces the emergence and growth of the United States following Reconstruction to the present. Primary and secondary source materials, reading and writing skills, technology, and critical thinking will be used to acquire and apply information.</p>
AP US History	<p>Grade Placement: 11-12 Credit 1</p> <p>This course traces the emergence of US History, beginning with pre-Columbian societies and continuing through the contemporary period. Emphasis is placed on reading, constructing arguments, and analyzing data and opinions. <i>*This class receives weighted points for class rank.</i></p>
Government	<p>Grade Placement: 12 Credit: 0.5</p> <p>This course is a study of the foundations of American Government, the electoral process, the three branches of federal government and our state and local government. We will deal specifically with the influences on our government today from early British examples and our colonial experience. The executive, legislative and judicial branch will be covered in depth as will our state governmental system. <i>*Dual credit is available and is an advanced class towards class rank.</i></p>
Economics	<p>Grade Placement: 12 Credit: 0.5</p> <p>This course is a one-semester overview of the basics of Economics. It emphasizes the economic principles upon which the free enterprise system is based. Students will study the role government plays in this system and compare the American economic system to other types of economic <i>*Dual credit is available and is an advanced class towards class rank.</i></p>

SOCIAL STUDIES Course Descriptions

Course	Description
<p>AP Macro-economics</p>	<p>Grade Placement: 12 Credit 0.5 This course focuses on the principles of economics that apply to an economic system including the relationship between national and international economic decisions. Credit in U.S. History is recommended. <i>*This class receives weighted points for class rank.</i></p>
<p>AP Government & Politics, United States</p>	<p>Grade Placement: 12 Credit 0.5 This course will focus on the study of the government established by the U.S. Constitution, including the federal system, separation of powers, and major historical events in the American political system. Knowledge of U.S. History is strongly recommended. <i>*This class receives weighted points for class rank.</i></p>
<p>AP Psychology</p>	<p>Grade Placement: 12 Credit: 0.5 This course will introduce students to the systematic study of behavior and mental processes of humans and other animals. Students learn the terminology, facts, principles, and theories of each major subfield. <i>*This class receives weighted points for class rank.</i></p>
<p>Psychology</p>	<p>Grade Placement: 10-12 Credit: 0.5 This introduction to the field of psychology includes opportunities for students to study the historical development of the field of psychology, consider the development of the individual and personality, and to study various topics including emotion, motivation, learning, and dysfunctional behavior.</p>
<p>Sociology</p>	<p>Grade Placement: 10-12 Credit: 0.5 This course focuses on the scientific study of human behavior, social groups, and society. Using case studies, current events, and research, students will study components of culture, research methods, social structure, stratification, the socializing process, deviant social control, and social movements.</p>
<p>Dual Credit US History 1301/1302</p>	<p>Grade Placement: 11-12 Credit: 1 A survey of 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. <i>*Course offered in conjunction with Paris Junior College.</i></p>

ADDITIONAL Courses

Additional and Elective Course Offerings

PROGRAM	REQUIREMENTS FOR GRADUATION	COURSE OFFERINGS
<p>LOTE <i>Languages Other Than English</i></p>	2 credits required	<p>Spanish I</p> <p>Spanish II</p> <p>German I</p> <p>German II</p>
Physical Education	1 credit required	<p>Physical Education</p> <p>Athletics</p> <p>Adventure/Outdoor Education</p>
Fine Arts	1 credit required	<p>Band</p> <p>Theatre I</p> <p>Floral Design</p> <p>Art</p> <p>Digital Art & Animation</p>
Additional Elective Options	<p>Creative Writing (0.5 credit)</p> <p>Journalism (0.5 credit)</p> <p>Advanced Journalism - Yearbook</p> <p>Dollars & Sense (0.5 credit)</p> <p>Financial Mathematics</p> <p>Psychology & Sociology (0.5 credit each)</p> <p>Professional Communications (0.5 credit)</p>	
Local Credit Elective Options	Student Aide	

ADDITIONAL Course Descriptions

Course	Description
LOTE (Languages Other Than English) Courses	
Spanish I	Grade Placement: 9-12 Credit: 1 Students begin developing oral and written communication skills in familiar contexts while building confidence in their language abilities and exploring the target culture.
Spanish II	Grade Placement: 9-12 Credit: 1 Students further develop basic oral and written communication skills in the language through culturally authentic activities continuing to develop confidence and competence in the target language
Spanish III	Grade Placement: 9-12 Credit: 1 Spanish III continues to emphasize the communication skills established in levels I and II to increase proficiency. Students will learn advanced structures and vocabulary necessary to interact socially, communicate ideas, feelings and attitudes, and to provide and request information. The study of Hispanic culture will be highlighted through videos, art, literature and authentic readings.
German I	Grade Placement: 9-12 Credit: 1 This course introduces the basic language skills of listening, speaking, reading, and writing across all three modes of communication: Interpretive, interpersonal and presentational. Students learn common expressions to communicate about basic, everyday topics and are expected to actively participate in class.
German II	Grade Placement: 9-12 Credit: 1 This course reviews concepts taught in the previous level and continues with additional structures and vocabulary to increase language proficiency.

ADDITIONAL Course Descriptions

Course	Description
Physical Education Courses	
Physical Education	<p>Grade Placement: 9-12 Credit: 1</p> <p>In the Physical Education Course, you will get a basic understanding of human anatomy and its functions. You will work toward cardiovascular fitness through a variety of activities. <i>PE credit can also be earned through Marching Band in the fall semester for ½ credit.</i></p>
Athletics	<p>Grade Placement: 9-12 Credit: 1</p> <p>Students participating in a team sport must be enrolled in the athletic period. For all eligibility requirements please see the Athletic Policy or speak with the athletic director. Students will be required to complete a UIL physical examination.</p>
Adventure/ Outdoor Education	<p>Grade Placement- 9-12 Credit: 1</p> <p>Students enrolled in adventure outdoor education are expected to develop competency in outdoor education activities that provide opportunities for enjoyment and challenge. Emphasis is placed upon student selection of activities that also promote a respect for the environment and that can be enjoyed for a lifetime.</p>

ADDITIONAL Course Descriptions

Course	Description
Fine Arts Courses	
Band	<p>Grade Placement: 9-12 Credit: 1 Director Approval Marching band in the fall can count as PE credit and spring semester can count as ½ credit of fine arts. Therefore, 2 years of band would equal 1 year of PE and 1 year of fine arts.</p>
Theatre Arts	<p>Grade Placement: 9-12 Credit: 1 Students communicate in a dramatic form, make artistic choices, solve problems, build positive self concepts, and relate interpersonally. This course is a study of basic theatre concepts as well as basic acting techniques including movement, vocal quality and character development. This course will count as fine arts credit towards graduation.</p>
Art	<p>Grade Placement: 9-12 Credit: 1 Recommended Prerequisite: Theatre Arts I The advanced levels of Theatre Arts are for students who wish to concentrate on and practice play production. The course focuses on the more advanced aspects of theatre including scene writing, directing, children's theatre, puppetry, masks, and acting styles. Projects will consist of rehearsing, creating and performing for the public. Some after school time may be required.</p>
Floral Design	<p>Grade Placement: 9-12 Credit: 1 To be prepared for careers in floral design, students need to attain academic skills and knowledge as well as 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 their knowledge and skills and technologies 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.</p>
Digital Art & Animation	<p>Grade Placement: 11-12 Credit: 1 Digital Art and Animation consists of computer images and animations created with digital imaging software. Digital Art and Animation has applications in many careers, including graphic design, advertising, web design, animation, corporate communications, illustration, character development, script writing, storyboarding, directing, producing, inking, project management, editing, and the magazine, television, film, and game industries. Students in this course will produce various real-world projects and animations.</p>

ADDITIONAL Course Descriptions

Course	Description
Creative Writing	<p>Grade Placement: 9-12 Credit: 0.5</p> <p>This rigorous composition course requires high school students to demonstrate their skills in such forms of writing as essays, short stories, poetry, and drama.</p>
Journalism	<p>Grade Placement: 9-12 Credit: 0.5</p> <p>This course reviews the history of mass print media as well as its contemporary role in the United States. Students will analyze and compose journalistic writing and prepare materials necessary for newspaper and yearbook design. It is recommended that students earn an average grade or higher in their prior English course and have strong typing skills. Typing skills are recommended but not required.</p>
Advanced Journalism (Yearbook)	<p>Grade Placement: 10-12 Credit: 1</p> <p>This course continues the students' study of mass communications while applying their skills to the processes of writing, designing, and editing a school yearbook. Typing skills are suggested but not required.</p>
Dollars & Sense	<p>Grade Placement: 11-12 Credit: 0.5</p> <p>Dollars and Sense focuses on consumer practices and responsibilities, money-management processes, decision-making skills, impact of technology, and preparation for human services careers.</p>
Financial Mathematics	<p>Grade Placement: 11-12 Credit: 1</p> <p>Financial Mathematics is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. Financial Mathematics will integrate career and postsecondary education planning into financial decision making.</p>
Psychology	<p>Grade Placement: 10-12 Credit: 0.5</p> <p>This introduction to the field of psychology includes opportunities for students to study the historical development of the field of psychology, consider the development of the individual and personality, and to study various topics including emotion, motivation, learning, and dysfunctional behavior.</p>
Sociology	<p>Grade Placement: 10-12 Credit: 0.5</p> <p>This course focuses on the scientific study of human behavior, social groups, and society. Using case studies, current events, and research, students will study components of culture, research methods, social structure, stratification, the socializing process, deviant social control, and social movements.</p>

ADDITIONAL Course Descriptions

Course	Description
Professional Communicaitons	<p>Grade Placement: 10-12 Credit: 0.5</p> <p>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.</p>
Student Aide	<p>Grade Placement: 12 Local credit only</p> <p>Students will be chosen to work in aid positions in the high school office, high school library, technology office, nurse's office (at all campuses) and the elementary school. Students should indicate on their selection sheet where they want to work. Students will be chosen on special skills, availability and trustworthiness.</p>

ENGINEERING Career Cluster

Science, Technology, Engineering & Mathematics Endorsement



Career Cluster Description

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

Visit TEA CTE Programs of Study for more information.

LOISD PROGRAM OF STUDY

ENGINEERING FOUNDATIONS

The Engineering program of study focuses on the design, development, and use of engines, machines, and structures. CTE learners will learn how to apply science, mathematical methods, and empirical evidence to the innovation, design, construction, operation, and maintenance of different manufacturing systems.

CAREER OPPORTUNITIES

Salaries

Software Developer, Systems Software

\$103,334

Computer Programmers

\$79,893

Mechanical Engineers

\$91,107

Industry Certifications

Autodesk Associate (Certified User)
AutoCAD

Certified Entry-Level Python
Programmer (PCEP)

Opportunities

Certification / License

2-year Degree

4-year Degree

Advanced Degree

ENGINEERING Career Cluster

Science, Technology, Engineering & Mathematics Endorsement



GRADE	ENGINEERING FOUNDATIONS
9th Grade	Principles of Applied Engineering (1 credit)
10th Grade	Engineering Design and Presentation I (1 credit)
11th Grade	Engineering Design and Problem Solving (1 credit)
12th Grade	Practicum in STEM (2 credits)
Industry Certification	Autodesk Associate (Certified User) AutoCAD

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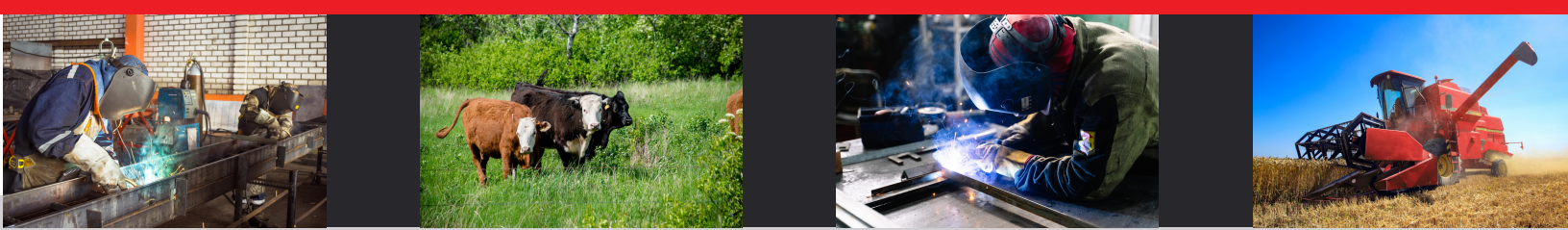
CTE Course Descriptions

Engineering Course Offerings

Course	Description
Principles of Applied Engineering	<p>Grade Placement: 9-12 Credit: 1 Prerequisites: None</p> <p>Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects.</p>
Engineering Design and Presentation I	<p>Grade Placement: 10-12 Credit: 1 Prerequisites: Algebra I</p> <p>Engineering Design and Presentation II is a continuation of knowledge and skills learned in Engineering Design and Presentation I. Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Emphasis will be placed on using skills from ideation through prototyping.</p>
Engineering Design and Problem Solving	<p>Grade Placement: 11-12 Credit: 1 Prerequisites: Algebra I and Geometry</p> <p>The Engineering Design and Problem-Solving course is the creative process of solving problems by identifying needs and then devising solutions. The solution may be a product, technique, structure, or process depending on the problem. Science aims to understand the natural world, while engineering seeks to shape this world to meet human needs and wants. Engineering design takes into consideration limiting factors or "design under constraint." Various engineering disciplines address a broad spectrum of design problems using specific concepts from the sciences and mathematics to derive a solution.</p>
Practicum in STEM	<p>Grade Placement: 12 Credit: 2 Prerequisites: Algebra I and Geometry</p> <p>The STEM Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as physical science, social science, engineering, including laboratory and testing services, and research and development services. Practicum in STEM is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.</p>

AGRICULTURE Career Cluster

Business & Industry Endorsement



Career Cluster Description

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.

Visit TEA CTE Programs of Study for more information.

LOISD PROGRAMS OF STUDY

ANIMAL SCIENCE

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.

AGRICULTURAL TECHNOLOGY AND MECHANICAL SYSTEMS (Welding)

The Agricultural Technology and Mechanical Systems 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.

CAREER OPPORTUNITIES

Salaries

Agricultural Engineers

\$64,792

Welders

\$41,350

Veterinarians

\$93,496

Industry Certifications

Certified Veterinary Assistant

AWS D1.1 Structural Steel

AWS D9.1 Sheet Metal Welding

AWS SENSE Level 1: Entry Welder

Opportunities

Certification / License

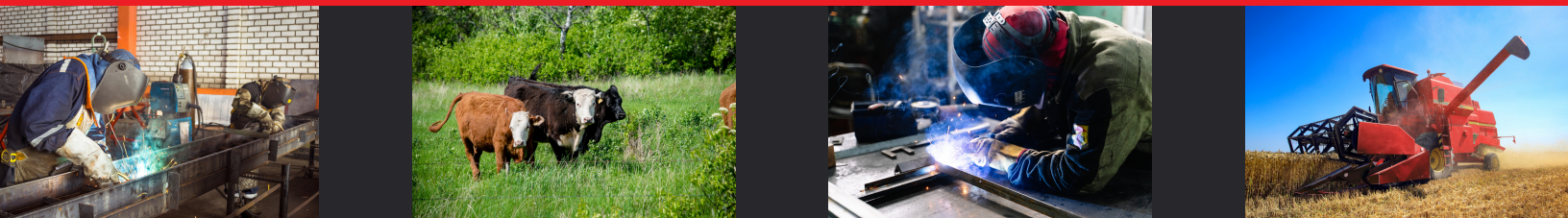
2-year Degree

4-year Degree

Advanced Degree

AGRICULTURE Career Cluster

Business & Industry Endorsement



GRADE	ANIMAL SCIENCE	WELDING
9th Grade	Principles of Agriculture, Food, and Natural Resources (1 credit)	Principles of Agriculture, Food, and Natural Resources (1 credit)
10th Grade	Small Animal Management AND Equine Science (1 credit)	Agricultural Mechanics and Metal Technologies (1 credit)
11th Grade	Advanced Animal Science OR Livestock Production (1 credit)	Agricultural Structures Design and Fabrications (1 credit)
12th Grade	Practicum in Agriculture, Food, and Natural Resources (2 credits)	Agricultural Power Systems (2 credits)
Industry Certification	Certified Veterinary Assistant	AWS D1.1 Structural Steel AWS D9.1 Sheet Metal Welding AWS SENSE Level 1: Entry Welder

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CTE Course Descriptions

Animal Science Course Offerings

Course	Description
Principles of Agriculture, Food, and Natural Resources	<p>Grade Placement: 9–12 Credit: 1 Prerequisites: None</p> <p>Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations.</p>
Small Animal Management	<p>Grade Placement: 10–12 Credit: .5 Prerequisites: Principles of Agriculture</p> <p>In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds.</p>
Equine Science	<p>Grade Placement: 10–12 Credit: .5 Prerequisites: Principles of Agriculture</p> <p>In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules.</p>
Advanced Animal Science	<p>Grade Placement: 11–12 Credit: 1</p> <p>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 prepare for careers in the field of animal science, students must 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.</p>
Livestock Production	<p>Grade Placement: 10–12 Credit: 1</p> <p>Livestock Production is designed for students to learn about animals that contribute to society by producing meat, milk, fiber, and work. Students will learn topics such as identification, evaluation, facilities/equipment, reproduction, and nutrition.</p>
Practicum of Agriculture, Food, and Natural Resources	<p>Grade Placement: 12 Credits: 2</p> <p>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. To prepare for careers in agriculture, food and natural resources, students must attain academic skills and knowledge, acquire technical knowledge and skills related to the workplace, 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 their knowledge and skills and technologies in a variety of settings.</p>

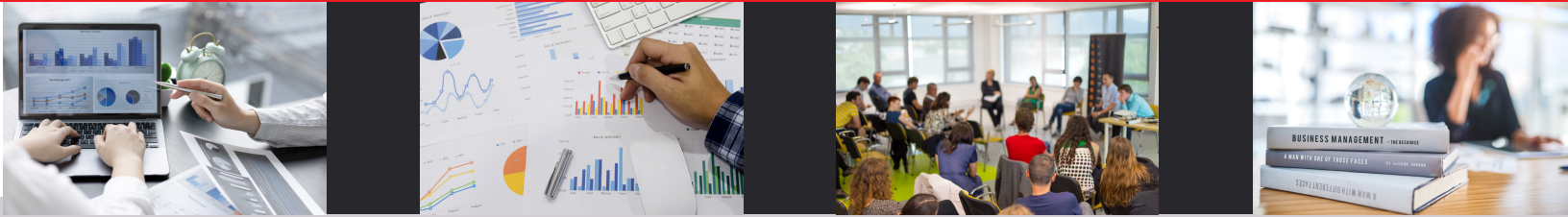
CTE Course Descriptions

Welding Course Offerings

Course	Description
Agricultural Mechanics and Metal Technologies	<p>Grade Placement: 10–12 Credit: 1 Prerequisites: Principles of Agriculture Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources. 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 metalworking 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.</p>
Agricultural Equipment Design and Fabrication	<p>Grade Placement: 11–12 Credit: 1 Prerequisites: Principles of Agriculture and Agricultural Mechanics Recommended Prerequisites: Agricultural Mechanics and Metal Technologies. In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment.</p>
Agricultural Power Systems	<p>Grade Placement: 11–12 Credit: 2 Prerequisites: Principles of Agriculture and Agricultural Mechanics Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources. Agricultural Power Systems is designed to develop an understanding of power and control systems as related to energy sources, small and large power systems, and agricultural machinery. 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 workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.</p>

BUSINESS Career Cluster

Business & Industry Endorsement



Career Cluster Description

The Business, Marketing, and Finance Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

Visit TEA CTE Programs of Study for more information.

LOISD PROGRAMS OF STUDY

BUSINESS MANAGEMENT

The Business Management program of study teaches CTE learners how to plan, direct, and coordinate the administrative services and operations of an organization. Through this program of study, students will learn the skills necessary to formulate policies, manage daily operations, and allocate the use of materials and human resources. This program of study will also introduce students to mathematical modeling tools and organizational evaluation methods.

ENTREPRENEURSHIP

The Entrepreneurship program of study teaches CTE learners how to plan, direct, and coordinate the management and operations of public or private sector organizations. Through this program of study, students will learn the skills necessary to formulate policies, manage daily operations, analyze management structures, and plan for the use of materials and human resources.

CAREER OPPORTUNITIES

Salaries

General and Operations Managers

\$107,640

Management Analysts

\$87,651

Administrative Service Managers

\$96,138

Industry Certifications

Entrepreneurship and Small Business

Microsoft Office Specialist

Microsoft Word Expert

Opportunities

Certification / License

2-year Degree

4-year Degree

Advanced Degree

BUSINESS Career Cluster

Business & Industry Endorsement



GRADE	BUSINESS MANAGEMENT	ENTREPRENEURSHIP
9th Grade	Principles of Business, Marketing, and Finance (1 credit)	Principles of Business, Marketing, and Finance (1 credit)
10th Grade	Business Information Management I (1 credit)	Entrepreneurship (1 credit)
11th Grade	Business Information Management II (1 credit)	Entrepreneurship II (1 credit)
12th Grade	Practicum in Entrepreneurship (2 credits)	Practicum in Entrepreneurship (2 credits)
Industry Certification	Microsoft Office Specialist Microsoft Word Expert	Entrepreneurship and Small Business

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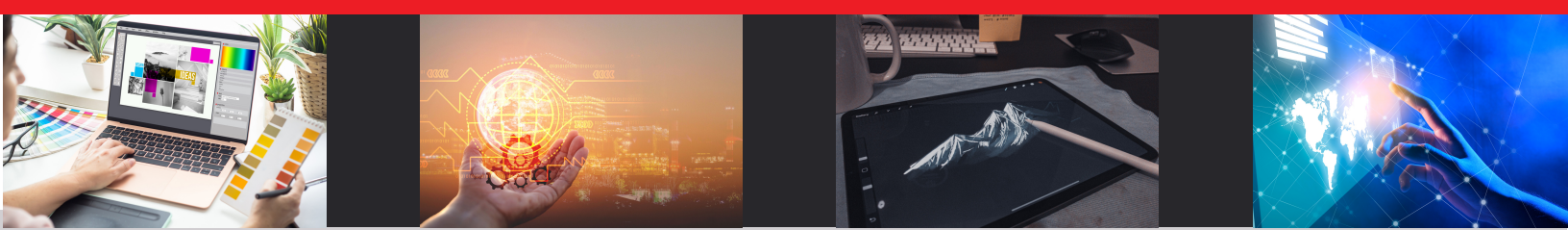
CTE Course Descriptions

Business and Entrepreneurship Course Offerings

Course	Description
Principles of Business, Marketing, and Finance	<p>Grade Placement: 9-12 Credit: 1</p> <p>Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects.</p>
Business Information Management I	<p>Grade Placement: 10-12 Credits: 1</p> <p>Recommended Prerequisite: Touch System Data Entry. Recommended Corequisite: Business Lab. In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.</p>
Business Information Management II	<p>Grade Placement: 11-12 Credits: 1</p> <p>Prerequisite: Business Information Management I Recommended Prerequisite: Touch System Data Entry. Recommended Corequisite: Business Lab. In Business Information Management II, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.</p>
Entrepreneurship	<p>Credits: 1 Grade Placement : 10 - 12</p> <p>Prerequisite: Principles of Business, Marketing, and Finance</p> <p>In Entrepreneurship, students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.</p>
Entrepreneurship II	<p>Credits: 1 Grade Placement : 11 - 12</p> <p>Prerequisite: Principles of Business, Marketing, and Finance and Entrepreneurship I</p> <p>Students will work in close cooperation with local industry leaders, community members, and educators to develop ideas and objectives, complete a business model canvas, pitch to potential investors, register with governmental agencies, and develop brand identity. The goal and outcome of the course is to have a business launched by the end of the course or have the tools necessary to launch and operate a business.</p>
Practicum in Entrepreneurship	<p>Credits: 2 Grade Placement: 12 Prerequisites: None</p> <p>The Practicum in Entrepreneurship provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner versus the experience one would have as an employee.</p>

AUDIO/VIDEO Career Cluster

Business & Industry Endorsement



Career Cluster Description

The Arts, A/V Technology and Communications (AAVTC) Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services. Careers in the AAVTC career cluster require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication.

Visit TEA CTE Programs of Study for more information.

LOISD PROGRAMS OF STUDY

GRAPHIC DESIGN & INTERACTIVE MEDIA

The Graphic Design and Interactive Media program of study explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.

CAREER OPPORTUNITIES

Salaries

Graphic Designers
\$44,824

Multimedia Artists and Animators
\$67,392

Industry Certifications

Adobe Certified Professional

Opportunities

Certification / License

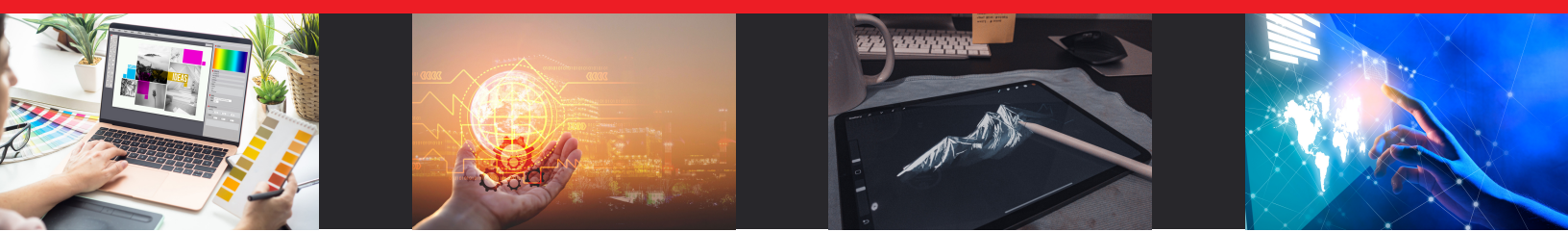
2-year Degree

4-year Degree

Advanced Degree

AUDIO/VIDEO Career Cluster

Business & Industry Endorsement



GRADE	GRAPHIC DESIGN & INTERACTIVE MEDIA
9th Grade	Principles of Arts, A/V Technology, and Communications (1 credit)
10th Grade	Digital Design and Media Production (1 credit)
11th Grade	Digital Arts and Animation (1 credit)
12th Grade	Practicum in Entrepreneurship (2 credits)
Industry Certification	Adobe Certified Professional

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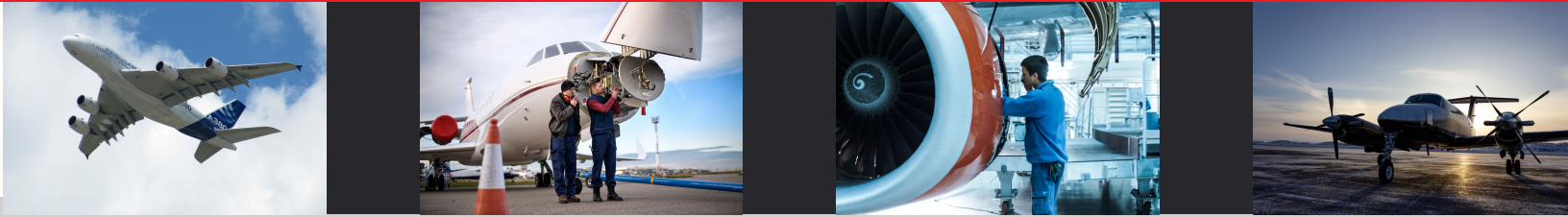
CTE Course Descriptions

Graphic Design & Interactive Media Course Offerings

Course	Description
Principles of Arts, Audio/Video Technology, and Communication	<p>Grade Placement: 9-12 Credits: 1 Prerequisite: None</p> <p>The goal of this course is for the student to understand arts, audio/video technology, and communications systems. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities.</p>
Digital Design and Media Production	<p>Grade Placement: 10-12 Credits: 1 Prerequisite: None</p> <p>Digital Design and Media Production will allow students to demonstrate creative thinking, develop innovative strategies, and use communication tools in order to work effectively with others as well as independently. Students will gather information electronically, which will allow for problem solving and making informed decisions regarding media projects. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will demonstrate a thorough understanding of digital design principles that is transferable to other disciplines.</p>
Digital Arts and Animation	<p>Grade Placement: 10-12 Credits: 1</p> <p>Digital Art and Animation consists of computer images and animations created with digital imaging software. Digital Art and Animation has applications in many careers, including graphic design, advertising, web design, animation, corporate communications, illustration, character development, script writing, storyboarding, directing, producing, inking, project management, editing, and the magazine, television, film, and game industries. Students in this course will produce various real-world projects and animations.</p>
Practicum in Entrepreneurship	<p>Credits: 2 Grade Placement: 12 Prerequisites: None</p> <p>The Practicum in Entrepreneurship provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner versus the experience one would have as an employee.</p>

TRANSPORTATION Career Cluster

Business & Industry Endorsement



Career Cluster Description

The Transportation, Distribution, and Logistics Career Cluster focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

Visit TEA CTE Programs of Study for more information.

LOISD PROGRAMS OF STUDY

AVIATION MAINTENANCE (AEROSPACE)

The Aviation Maintenance program of study introduces students to the occupations and education opportunities related to inspecting aircraft, maintenance procedures, air navigational aids, air traffic controls, and communications equipment to ensure conformance with federal safety regulations.

PARTNERSHIP WITH L3 AND TANGO FLIGHT!

This program of study will create partnership opportunities with our local business partners including L3! Students will learn about aircraft technology and aerospace engineering programs and conclude with a build experience partnership with Tango Flight.

CHECK COURSE SEQUENCE FOR YEARS OF IMPLEMENTATION.

CAREER OPPORTUNITIES

Salaries

Aircraft Mechanics and Technicians
\$58,698

Avionics Technicians
\$59,114

Industry Certifications

Aerospace Manufacturing
Certification

Opportunities

Certification / License

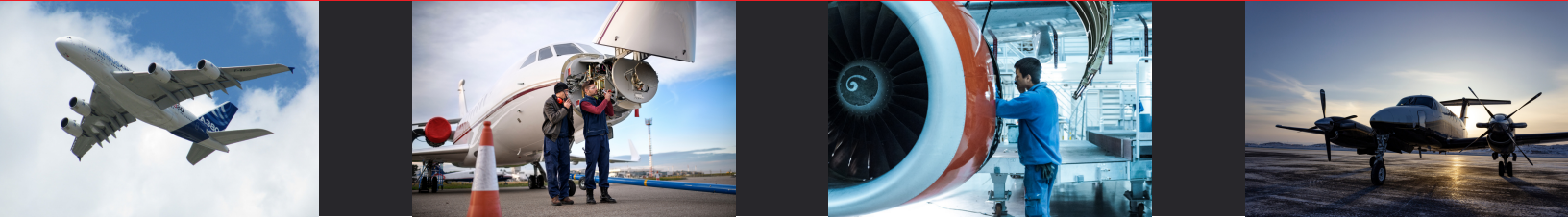
2-year Degree

4-year Degree

Advanced Degree

TRANSPORTATION Career Cluster

Business & Industry Endorsement



Course sequence will vary for the 2024-2025 school year.

GRADE	AVIATION MAINTENANCE	COMING SOON IN THE FOLLOWING SCHOOL YEARS
9th Grade	Introduction to Aircraft Technology (1 credit)	2023-2024
10th Grade	Aviation Maintenance (1 credit)	2024-2025
11th Grade	Aircraft Airframe Technology (2 credits)	2025-2026
12th Grade	Practicum in Transportation Systems (2 credits)	2026-2027
Industry Certification	Aerospace Manufacturing Certification	

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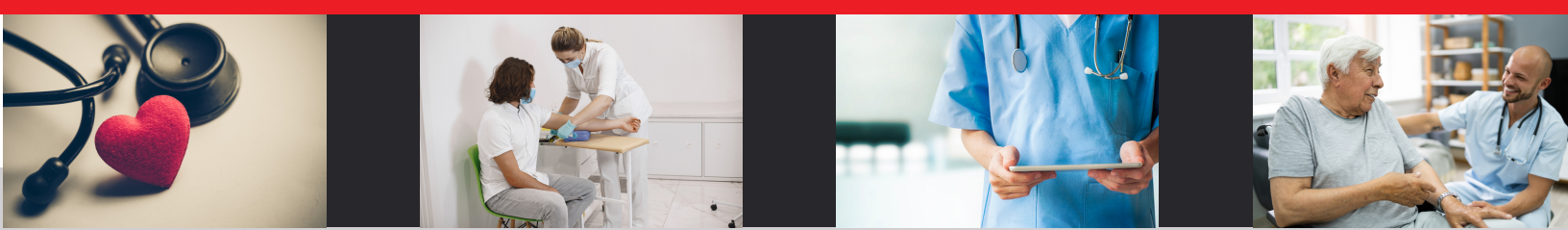
CTE Course Descriptions

Aviation Course Offerings

Course	Description
Introduction to Aircraft Technology	<p>Grade Placement: 9-12 Credit: 1 Prerequisites: None</p> <p>Introduction to Aircraft Technology is designed to teach the theory of operation of aircraft airframes, powerplants, and associated maintenance and repair practices. Maintenance and repair practices include knowledge of the function, diagnosis, and service of general curriculum subjects, airframe structures, airframe systems and components, powerplant theory and maintenance, and powerplant systems and components of aircraft. Industry recognized professional licensures, certifications, and registrations are available for students who meet the requirements set forth by the accrediting organization.</p>
Aircraft Maintenance	<p>Grade Placement: 10 Credits: 1 Prerequisite: Introduction to Aircraft Technology</p> <p>A continuation of Introduction to Aircraft Technology. Students will continue to use the AOPA curriculum to enhance knowledge.</p>
Aircraft Airframe Technology	<p>Grade Placement: 11-12 Credits: 2 Prerequisite: Introduction to Aircraft Technology</p> <p>Aircraft Airframe Technology is designed to teach the theory of operation of aircraft airframes and associated maintenance and repair practices. Airframe maintenance and repair practices include knowledge of the function, diagnosis, and service of airframe structures, systems, and components of aircraft.</p>
Practicum in Transportation Systems	<p>Credits: 2 Grade Placement: 12 Prerequisites: Previous Aviation Courses</p> <p>Practicum in Transportation Systems 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 experience such as internships, mentorships, independent study, or laboratories. The Practicum can be either school lab based or worked based.</p>

HEALTH SCIENCE Career Cluster

Public Service Endorsement



Career Cluster Description

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.

Visit TEA CTE Programs of Study for more information.

LOISD PROGRAMS OF STUDY

EXERCISE SCIENCE, WELLNESS, AND RESTORATION

ATHLETIC TRAINERS ONLY

The Exercise Science, Wellness, and Restoration program of study introduces CTE learners to the fields that assist patients with maintaining physical, mental, and emotional health. Students will research diet and exercise needed to maintain a healthy, balanced lifestyle and learn about and practice techniques to help patients recover from injury, illness, or disease.

DIAGNOSTIC & THERAPEUTIC SERVICES

The Diagnostic & Therapeutic Services 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.

CAREER OPPORTUNITIES

Salaries

Dieticians and Nutritionists

\$57,762

Athletic Trainers

\$53,450

Medical Assistants

\$29,598

Industry Certifications

Certified Personal Trainer

Pre-Professional Certification in
Nutrition, Food, and Wellness

Patient Care Technicians

Opportunities

Certification / License

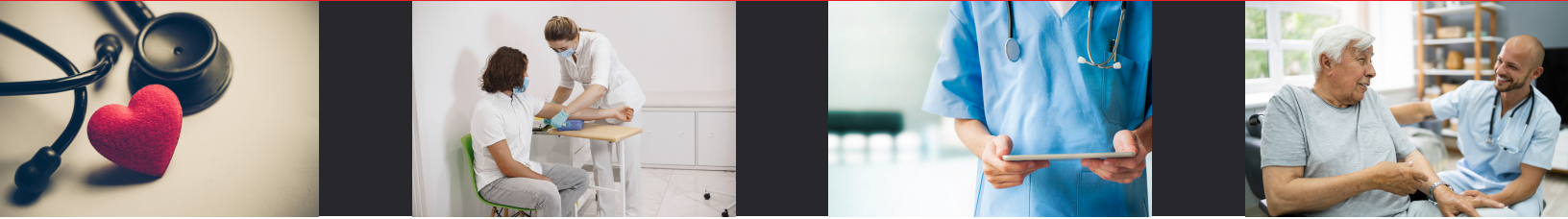
2-year Degree

4-year Degree

Advanced Degree

HEALTH SCIENCE Career Cluster

Public Service Endorsement



GRADE	EXERCISE SCIENCE, WELLNESS, & RESTORATION	DIAGNOSTIC & THERAPEUTIC SERVICES
9th Grade	Principles of Exercise Science and Wellness (1 credit)	Principles of Health Science (1 credit)
10th Grade	Kinesiology I (1 credit)	Medical Terminology (1 credit)
11th Grade	Anatomy and Physiology (1 credit)	Health Science Theory AND / OR Anatomy and Physiology (1 credit)
12th Grade	Practicum in Entrepreneurship (2 credits)	Practicum in Health Science (2 credits)
Industry Certification	Certified Personal Trainer Pre-Professional Certification in Nutrition, Food, and Wellness	Certified Patient Care Technician

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CTE Course Descriptions

Exercise Science, Eellness, & Restoration Course Offerings

Course	Description
Principles of Exercise Science	<p>Grade Placement: 9-12 Credits: 1</p> <p>The Principles of Exercise Science and Wellness course is designed to provide for the development of knowledge and skills in fields that assist patients with maintaining physical, mental, and emotional health.</p>
Kinesiology I	<p>Grade Placement: 10-12 Credit: 1</p> <p>This course is designed to introduce students to the basic concepts of kinesiology. Students will gain an understanding of body mechanics, physiological functions of muscles and movements, the history of kinesiology, and the psychological impact of sports and athletic performance.</p>
Anatomy and Physiology	<p>Grade Placement: 11-12 Credit: 1</p> <p>Prerequisite: Biology and a second science credit. Recommended Prerequisite: A course from the Health and Science Career Cluster.</p> <p>The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.</p>
Practicum in Entrepreneurship	<p>Credits: 2 Grade Placement: 12 Prerequisites: None</p> <p>The Practicum in Entrepreneurship provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner versus the experience one would have as an employee.</p>

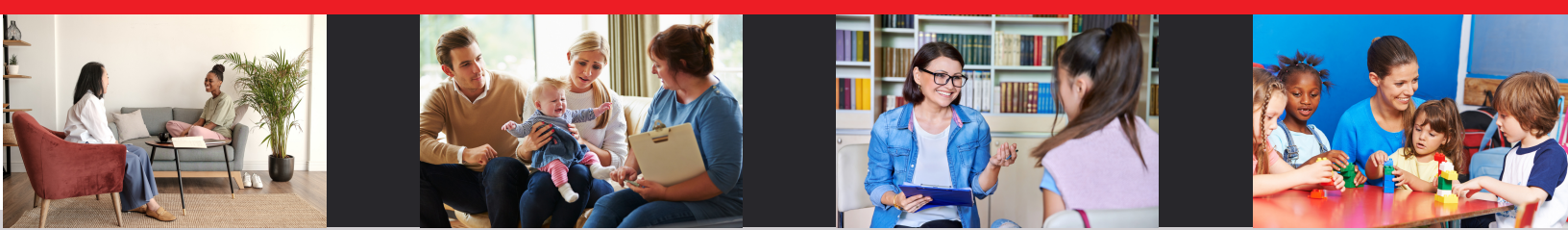
CTE Course Descriptions

Diagnostic & Therapeutic Services Course Offerings

Course	Description
Principles of Health Science	<p>Grade Placement: 9–12 Credit: 1 Prerequisite: None.</p> <p>The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry.</p>
Medical Terminology	<p>Grade Placement: 10–12 Credit: 1 Prerequisite: None</p> <p>The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.</p>
Health Science Theory	<p>Grade Placement: 10–12 Credit: 1 Prerequisites: Principles of Health Science and Biology</p> <p>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.</p>
Anatomy and Physiology	<p>Grade Placement: 11–12 Credit: 1 Prerequisite: Biology and a second science credit. Recommended Prerequisite: A course from the Health and Science Career Cluster.</p> <p>The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.</p>
Practicum in Health Science	<p>Grade Placement: 12 Credit: 2 Prerequisites: Health Science Theory and Biology</p> <p>The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.</p>

HUMAN SERVICES Career Cluster

Public Service Endorsement



Career Cluster Description

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.

Visit TEA CTE Programs of Study for more information.

LOISD PROGRAMS OF STUDY

FAMILY AND COMMUNITY SERVICES

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.

CAREER OPPORTUNITIES

Salaries

Child, Family, and School Social Workers

\$41,350

Marriage and Family Therapists

\$42,266

Social and Community Services Managers

\$65,146

Industry Certifications

Community Health Workers

Child Development Associate
(CDA)

Opportunities

Certification / License

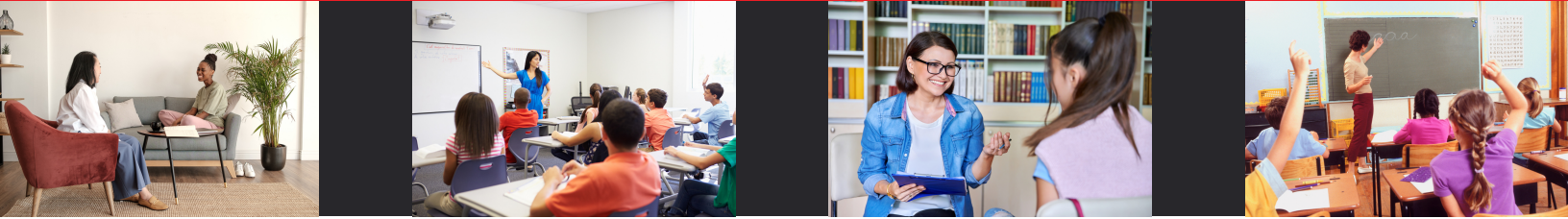
2-year Degree

4-year Degree

Advanced Degree

HUMAN SERVICES Career Cluster

Public Service Endorsement



GRADE	FAMILY AND COMMUNITY SERVICES
9th Grade	Principles of Human Services (1 credit)
10th Grade	Human Growth and Development (1 credit)
11th Grade	Lifetime Nutrition and Wellness (0.5 credit) AND Interpersonal Studies (0.5 credit)
12th Grade	Practicum in Entrepreneurship (2 credits)
Industry Certification	Community Health Workers Child Development Associate (CDA)

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CTE Course Descriptions

Family & Community Services Course Offerings

Course	Description
Principles of Human Services	<p>Grade Placement: 9-12 Credit: 1 Prerequisites: None</p> <p>Principles of Human Services is a laboratory course that will enable students to investigate careers in the Human Services Career Cluster, including counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.</p>
Human Growth and Development	<p>Grade Placement: 10-12 Credit: 1</p> <p>Human Growth and Development is an examination of human development across the lifespan with emphasis on research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones.</p>
Lifetime Nutrition and Wellness	<p>Grade Placement: 10-12 Credit: .5 Prerequisites: None</p> <p>Recommended Prerequisite: Principles of Human Services, Principles of Hospitality and Tourism, or Principle of Health Science.</p> <p>Lifetime Nutrition and Wellness is a laboratory course that allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences.</p>
Interpersonal Studies	<p>Grade Placement: 10-12 Credit: .5 Prerequisites: None</p> <p>Studies examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.</p>
Practicum in Entrepreneurship	<p>Credits: 2 Grade Placement: 12 Prerequisites: None</p> <p>The Practicum in Entrepreneurship provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner versus the experience one would have as an employee.</p>

CTE Course Descriptions

Additional CTE Course Offerings

Course	Description
Practicum in Business Management	<p>Credits: 2 Grade Placement: 12 Prerequisites: None</p> <p>The Practicum in Entrepreneurship provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner versus the experience one would have as an employee.</p>
Career Prep	<p>Credits: 2 Grade Placement: 12 Prerequisites: None</p> <p>Career Preparation is a year-long course that provides opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. This instructional arrangement should be an advanced component of a student's individual program of study. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.</p>

4-YEAR Planning

Complete the following course planning document. Please return document signed to your counselor.

STUDENT NAME: _____ GRADUATION CLASS: _____

ENDORSEMENT SELECTION: _____

PROGRAM OF STUDY SELECTION: _____

CAREER GOALS: _____

PLANS AFTER GRADUATION: College Tech School Military Seek Employment

Course Planning

Write in your course selection choice for each block.
Use the course planning guides to help you complete your 4-year plan.

	9th Grade	10th Grade	11th Grade	12th Grade
English				
Math				
Science				
Social Studies				
CTE Courses				
LOTE or Electives				
Athletics or Electives				
Electives				

PARENT SIGNATURE: _____ STUDENT SIGNATURE: _____

