2023-2024

HIGH SCHOOL CURRICULUM GUIDELINES

LEAD
LEARN | ENGAGE | ADVANCE | DEVELOP
SHARYLAND ISD

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Sharyland Independent School District

Sharyland Independent School District is named in honor of John H. Shary, who was president of the district's first Board of Trustees. Created in 1921, this twenty-six square-mile school district is located in Hidalgo County. Sharyland ISD is committed to providing the highest quality education to inspire academic excellence and provide students the foundation for a successful post-secondary college and career experience.

Public schools in Sharyland Independent School District include: Jessie L. Jensen Elementary School, John H. Shary Elementary School, Lloyd and Dolly Bentsen Elementary School, Olivero Garza, Sr. Elementary School, Romulo D. Martinez Elementary School, Ruben Hinojosa Elementary School, Donna Wernecke Elementary School, Harry Shimotsu Elementary School, B.L. Gray Junior High School, Sharyland North Junior High School, Sharyland Advanced Academic Academy, Sharyland High School and Sharyland Pioneer High School.

At Sharyland ISD, we believe:

- In educating the whole child through a culture of academic success
- All children can learn and succeed
- In providing high expectations for student achievement and quality instruction
- In innovative practices in a rigorous environment
- In embracing diversity
- In valuing parental involvement and community partnerships
- Our staff is dedicated to excellence
- A safe, supportive environment is necessary for learning

Our Vision

Sharyland ISD…Excellence is our Tradition

Our Mission

Sharyland ISD's mission is to inspire, educate and empower all students to reach their full potential and become leaders
of the highest moral character.

A Message from Our Superintendent

Dear Sharyland Family,

In our unwavering commitment to educational excellence, Sharyland Independent School District's Department of Curriculum and Instruction stands dedicated to providing students with an extraordinary and robust learning experience. Our mission is clear: to empower our students with an innovative curriculum, equip them with 21st-century college and career readiness skills, and deliver differentiated instruction tailored to each child's unique needs.

As we embark on this educational journey together, we present to you the Sharyland ISD Curriculum Guide, a vital resource designed to help you lay the strongest foundation for a future brimming with success. Sharyland ISD is a beacon of academic achievement, widely celebrated throughout Texas for its exceptional track record of stellar state achievement scores. We pride ourselves on offering an advanced curriculum that encompasses a vast array of highly competitive academic and extracurricular courses, as well as outstanding postsecondary readiness programs.

At Sharyland ISD, we take great pride in our commitment to understanding our students' interests. We invest in comprehensive student interest inventories and utilize this invaluable insight to craft programs and academic pathways that align with your passions and goals. Our commitment to student success is boundless, offering a diverse array of options, including certification programs, career and technical fields, dual credit opportunities, Advanced Placement (AP) programs, and more.

As Superintendent, my sincere hope is that our students will embark on this exciting journey with enthusiasm and determination. We wholeheartedly encourage our students to embrace challenges, delve deep into their passions, question conventional wisdom, and select the educational pathway that aligns seamlessly with their individual goals. Their experience at Sharyland ISD is merely the prologue to their life's narrative, and we are committed to making a profound impact that empowers them to become the finest version of themselves.

I must express my gratitude to our dedicated team of educators, our supportive Board of Trustees, and our parents and guardians, who are our true partners in education. Together, we will continue LEADing the Way to Excellence.

With immense pride and anticipation,

Sincerely,

Dr. Maria M. Vidaurri

Superintendent
Sharyland Independent School district

Course Description and Information Guide

The Sharyland ISD High School Curriculum Guide serves as an information guide designed to inform students about course and graduation requirements, as well as become familiar with all academic pathways available at SISD. It is our goal to provide ALL students with the tools necessary to become successful and productive adults in the future.

Students are highly encouraged to develop a four-year plan that is tailored to meet their own individual interests. In order to meet the needs and interests of each child, Sharyland ISD provides a vast array of opportunities in career and technical education programs, advanced placement, and dual credit courses, associate degree completion pathways, certificate courses in many high-demand occupations, and degree core-complete opportunities. Campus guidance counselors as well as administrative staff are available to assist students in developing a graduation plan that is right for each student.

Sharyland Independent School District also encourages families and community members to be well versed in what Sharyland ISD has to offer. It is important that students make informed decisions about what courses they take and how these courses will impact their future. If you have any questions, please visit with the administrative staff or guidance counselors at your campus to get the help you need.

SHARYLAND HIGH SCHOOL

Excellence • Leadership • Pride • Respect • Responsibility

Lori Ann Garza, Principal
Hilda Alejandro, Dean of Instruction
Cynthia Silva, Asst. Principal
Maggie Cantu, Asst. Principal
Jesus Flores, Asst. Principal
Dixie Elizondo, Campus Testing Coordinator
Carol Santiago, Head Counselor
Monica McIver, Counselor
Michael Ledesma, Counselor
Karina Valdes, Counselor
Rocio Montemayor, CTE Counselor
Elizabeth Rios, College & Career Counselor

1216 N. Shary Road, Mission, Texas 78572
(956) 580 - 5300

SHARYLAND PIONEER HIGH SCHOOL

Ericka Julie Carranza, Principal
Maria Barrera, Dean of Instruction
Casey Bickerton, Asst. Principal
Leticia Garcia-Rios, Asst. Principal
Eric Flores Asst. Principal
Athit Farias, Campus Testing Coordinator
Elizabeth Guerrero, Head Counselor
Monica I. Balderas, Counselor
Veronica Salinas, Counselor
Mayra Garcia, Counselor
Renee Huddleston, CTE Counselor
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SHARYLAND ADVANCED ACADEMIC ACADEMY

Diana Rojas, Principal
Gina Garcia, Dean of Instruction
Liliana Lopez-Reyes, Head Counselor
Janet Amaro, CTE, College & Career Readiness Advisor

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Mission, Texas 78572 (956) 584-6467

SHARYLAND ALTERNATIVE EDUCATION CENTER

Tizoc Silva, Administrator
Delilah Rodriguez District Lead Counselor

1501 N. Taylor Rd.
Mission, Texas 78572 (956) 584-6407

The contents of this handbook are not contractual and do not give rise to a claim of breach of contract against the school district. Courses listed may or may not be available on all campuses or may not be offered in a given year. Intervention courses that are not listed in this handbook may be offered to students who need to pass STAAR End-of-Course examinations. Sharyland ISD does not discriminate on the basis of color, national origin, sex or handicap, and provides equal opportunity for students in career and technical education programs and activities. The contents of this handbook may be amended in the future.

High School Graduation Requirements

A student entering Grade 9 in the 2014-2015 school year and thereafter, shall enroll in the courses necessary to complete the curriculum requirements for the Foundation High School Program specified in §74.12 of the Texas Administrative Code and the curriculum requirements for at least one endorsement specified in §74.12 of this title (relating to Endorsements).

Foundation Program with Endorsement	26 Credits	Foundation Program with Endorsement *PLUS* Distinguished Level of Achievement	26 credits
English Language Arts (4 Credits) Advanced English Courses: English IV, Advanced Journalism, Debate III, Yearbook III, AP English Literature, College Preparatory ELA HB5, Creative Writing, Humanities			
English I	1	English I	1
English II	1	English II	1
English III	1	English III	1
Advanced English Course	1	Advanced English Course	1
Mathematics (4 Credits) Additional Math Courses: Math Models, Digital Electronics, Accounting II, Algebra II, Pre-Calculus, Advanced Quantitative Reasoning, AP Statistics, AP Calculus AB, AP Calculus BC, College Preparatory Math HB5, College Algebra			
Algebra I	1	Algebra I	1
Geometry	1	Geometry	1
Additional Mathematics Course	1	Algebra II	1
Advanced Mathematics Course	1	Advanced Mathematics Course	1
Science (4 Credits) Additional Science Courses: Chemistry, AP Chemistry, Physics, AP Physics I, AP Biology, AP Environmental Science, Advanced Animal Science, Anatomy & Physiology, Medical Microbiology, Forensic Science, Scientific Research & Design, Engineering Science, Dual Credit Biology/Chemistry/Physics			
Biology	1	Biology	1
IPC, Chemistry, or Physics	1	IPC, Chemistry, or Physics	1
Additional Science Course	1	Additional Science Course	1
Additional Science Course	1	Additional Science Course	1
History (4 Credits)			
World Geography or World History	1	World Geography or World History	1
U.S. History	1	U.S. History	1
U.S. Government	0.5	U.S. Government	0.5
Economics	0.5	Economics	0.5
Languages Other Than English (2 Credits)			
Language Other Than English	2	Language Other Than English	2
Physical Education (1 Credit)			
Physical Education	1	Physical Education	1
Fine Arts (1 Credit)			
Fine Arts	1	Fine Arts	1
Additional Electives (6.5 Credits)			
Additional Electives	7	Additional Electives	7
Total Credits	**26**	**Total Credits**	**26**

Dual Credit or College Board Advanced Placement courses may satisfy graduation requirements, including requirements for required courses, advanced courses, and courses for elective credit, as well as, requirements for endorsements. Check with your academic guidance counselor for all available options.

Required Notification Regarding Algebra II as a High School Graduation Requirement

A student is not required by state law (Texas Education Code, Section 28.025) to successfully complete Algebra II as a requirement for high school graduation. However, there are potential consequences to a student who does not successfully complete an Algebra II course.

A student is eligible for automatic admission to a Texas public college or university as an undergraduate student if the student earned a grade point average in the top 10 percent of the student's high school graduating class or in the percentage of qualified applicants that are anticipated to be offered admission to The University of Texas at Austin*, and the applicant—

- successfully completed the requirements for the distinguished level of achievement under the foundation high school program at a public high school; or
- satisfied ACT's College Readiness Benchmarks on the ACT assessment or earned on the SAT assessment a score of at least 1,500 out of 2,400 or the equivalent.

A student may not earn the distinguished level of achievement or be eligible for automatic admission to a Texas public college or university as an undergraduate student if the student does not successfully complete high school Algebra II.

There are several state financial aid programs available for certain Texas public high school students. Certain state financial aid programs include curriculum requirements that should be considered when planning a student's high school career to ensure eligibility for financial aid under one of these programs. Please note that this is not a complete list of requirements and additional eligibility requirements apply. A full list of requirements is available through the Texas Higher Education Coordinating Board's (THECB) financial aid webpage at

http://www.collegeforalltexans.com/apps/financialaid/tofa.cfm?Kind=GS

For initial eligibility for a TEXAS grant, a student enrolling in an eligible institution must be a graduate of a public or accredited private high school in this state who completed the Foundation High School Program or its equivalent and have accomplished any two or more of the following:

- Successful completion of the course requirements of the International Baccalaureate diploma program or earning of the equivalent of at least 12 semester credit hours of college credit in high school through courses described in Texas Education Code (TEC), Sections 28.009(a)(1), (2), and (3)
- Satisfaction of the Texas Success Initiative (TSI) college readiness benchmarks prescribed by the THECB under TEC, Section 51.334 on any assessment instrument designated by the THECB or qualification for an exemption as described by TEC, Section 51.338(b), (c), or (d)
- Graduation in the top one-third of the person's high school graduating class or graduation from high school with a grade point average of at least 3.0 on a four-point scale or the equivalent
- Completion for high school credit of at least one advanced mathematics course following the successful completion of an Algebra II course or at least one advanced career and technical or technology applications course

Texas First Early High School Graduation Diploma Program

A student is entitled to early high school graduation under the Texas First Early High School Completion Program if the student meets the criteria established in paragraphs (1) and (2) of this subsection. A student who achieves a required score on an assessment to meet the requirement of any one of paragraphs (1) and (2) of this subsection, shall be allowed to use that same assessment to meet the requirement of another section if the student's score meets the required minimum for each section.

The student has met the following minimum criteria at the time of graduation:

a) Earned at least twenty-two (22) high school credits by any permissible method, including credit by examination;
b) Earned a final Grade Point Average equivalent to 3.0 on a 4.0 scale;
c) Earned an overall scaled score in at least the 80th percentile on one or more of the following assessments: ACT, SAT, PSAT/NMSQT, TSIA/TSIA2, or GED, *or* alternatively, has a grade point average in the top ten percent of the student's current class during the current or semester prior to the counselor's or administrator's verification under subsection (b) of a student's eligibility for early graduation under the Program; and
d) Completed the requirement for the State of Texas Assessments of Academic Readiness End-of-Course (STAAR EOC) examinations for English I or II, Algebra I, and Biology by one of the following methods:
    a. If the student has taken the STAAR EOC for English I or II, Algebra I, and Biology, the student has achieved the satisfactory level of performance as defined by the Commissioner of Education; or
    b. If the student has not taken the required STAAR EOC assessment for English I or II, Algebra I, or Biology, the student has satisfied the STAAR EOC requirement by achieving a passing score on a substitute assessment for that subject area authorized under Title 19 Texas Administrative Code, Chapter 101, Subchapter DD, §101.4002(b).
e) (2) The student has demonstrated the student's mastery of each subject area of English/Language Arts, Mathematics, Science, Social Studies, and a language other than English through assessments or other means eligible institutions commonly use to place students in courses that may be credited toward degree program requirements. A student may demonstrate mastery of each subject area, as applicable, by meeting one or more of the following criteria:
f) Credit earned in a course in the core curriculum of an institution of higher education in which the student received at least a C; or
g) Meeting the standards on the assessments set out in Figure 19.

Figure: 19 TAC §21.52(a)(2)(C)

TEXAS FIRST EARLY HIGH SCHOOL COMPLETION PROGRAM
Subject Area Assessments and Benchmarks

ASSESSMENT INSTRUMENT	**ENGLISH SUBJECT AREA**	MS	**MATH SUBJECT AREA**	MS	**SCIENCE SUBJECT AREA** Biology, Physics, Chemistry, or other science	MS	**SOCIAL STUDIES SUBJECT AREA** History, Government, Economics, Psychology, or other social studies	MS	**LANGUAGE OTHER THAN ENGLISH SUBJECT AREA** World language or Computer Science	MS
SAT	EBRW	480	Math	530	SAT ST	700	SAT ST	690	SAT ST	730
ACT	English	18	Math	22	Science	23	Reading	22	--	--
PSAT/NMSQT	EBRW	460	Math	510	--	--	--	--	--	--
ACT – Plan	English	19	Math	19	Science	20	Reading	18	--	--
AP	English	3	Math	3	AP ST	3	AP ST	3	AP ST	3
CLEP	English	50	Math	50	CLEP ST	50	CLEP ST	50	CLEP ST	50
IB	Language/ Literature	4	Math	4	Sciences ST	4	Individuals and Societies ST	4	Language Acquisition ST	4
TSIA	Reading	351 +4E	Math	450	--	--	--	--	--	--
TSIA2	ELAR	945 + 5E	Math	950	--	--	--	--	--	--
GED	English	165	Math	165	Science	165	Social Studies	165	--	--

Gray Column indicates **minimum score (MS)**
ST = Subject Test
E= Essay

State Assessments and Graduation Requirements

The State of Texas Assessments of Academic Readiness (STAAR) program, which was implemented in spring 2012, includes annual assessments for:

- Reading and Mathematics, grades 3–8
- Science at grades 5 and 8
- Social Studies at grade 8
- End-of-Course (EOC) assessments for English I, English II, Algebra I, Biology and U.S History.

The resources on the TEA website provide information to familiarize Texas educators as well as the public with the design and format of the STAAR program. The information should help educators understand how the STAAR program measures the Texas Essential Knowledge and Skills (TEKS) curriculum standards. These resources should support, not narrow or replace, the teaching of the state-mandated curriculum, the TEKS.

What is STAAR?

The State of Texas Assessments of Academic Readiness, or STAAR, is the state testing program that was implemented in the 2011–2012 school year. The Texas Education Agency (TEA), in collaboration with the Texas Higher Education Coordinating Board (THECB) and Texas educators, developed the STAAR program in response to requirements set forth by the 80th and 81st Texas legislature. STAAR is an assessment program designed to measure the extent to which students have learned and are able to apply the knowledge and skills defined in the state-mandated curriculum standards, the Texas Essential Knowledge and Skills (TEKS). Every STAAR question is directly aligned to the TEKS currently implemented for the grade/subject or course being assessed.

What are the general testing requirements for students enrolled in high school courses?

Regardless of enrolled grade level, students should take STAAR EOC assessments (Algebra I, English I, English II, Biology, and U.S. History) as they are completing the corresponding courses since these assessments are required for high school graduation based on TEC §39.025. For more information on STAAR End-of-Course, please visit https://tea.texas.gov/student.assessment/staar/

State of Texas Assessment of Academic Readiness (STAAR)

State of Texas Assessments of Academic Readiness (STAAR®)
Performance Labels and Policy Definitions

MASTERS GRADE LEVEL***
Performance in this category indicates that students are expected to succeed in the next grade or course with little or no academic intervention. Students in this category demonstrate the ability to think critically and apply the assessed knowledge and skills in varied contexts, both familiar and unfamiliar.

** For Algebra II and English III, this level of performance also indicates students are well prepared for postsecondary success.*

MEETS GRADE LEVEL**
Performance in this category indicates that students have a high likelihood of success in the next grade or course but may still need some short-term, targeted academic intervention. Students in this category generally demonstrate the ability to think critically and apply the assessed knowledge and skills in familiar contexts.

*** For Algebra II and English III, this level of performance also indicates students are sufficiently prepared for postsecondary success.*

APPROACHES GRADE LEVEL
Performance in this category indicates that students are likely to succeed in the next grade or course with targeted academic intervention. Students in this category generally demonstrate the ability to apply the assessed knowledge and skills in familiar contexts.

DID NOT MEET GRADE LEVEL
Performance in this category indicates that students are unlikely to succeed in the next grade or course without significant, ongoing academic intervention. Students in this category do not demonstrate a sufficient understanding of the assessed knowledge and skills.

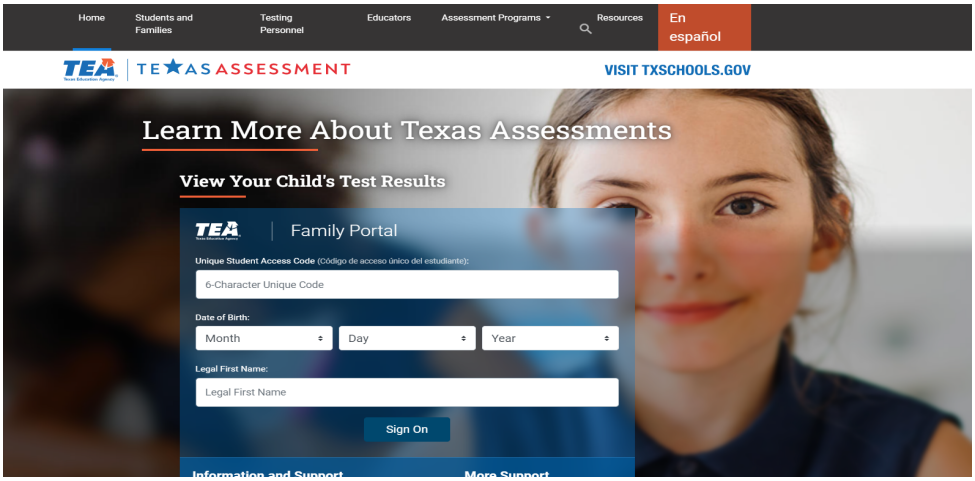
For more information, please visit https://tea.texas.gov/student.assessment/staar/performance-standards/.

STAAR EOC Student Scores

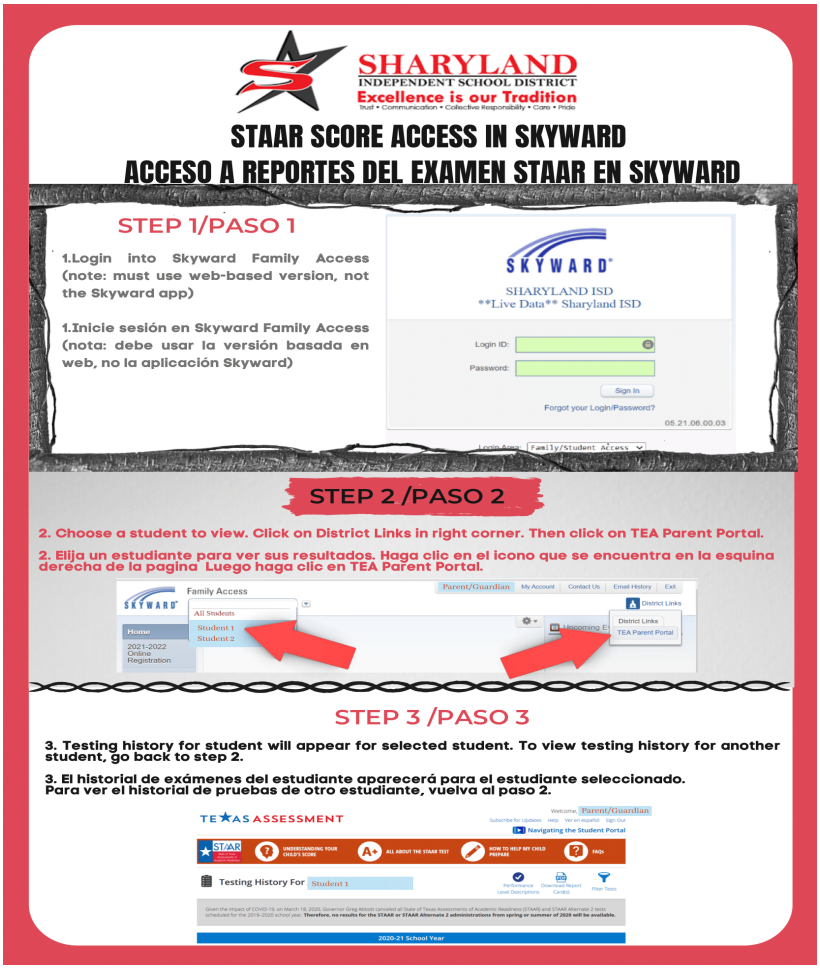
To log in to www.texasassessment.com and view your assessment results, enter your six-character Unique Access Code and the student's date of birth that appears on your most recent STAAR Report Card. The code must be entered exactly as it appears.

Don't Have an Access Code?

If you don't have a Unique Access Code or a copy of your STAAR Student Report Card, please contact your local school.



For more information on STAAR End-of-Course assessments, please visit www.texasassessment.com.



Graduation, Scheduling, and Grading Procedures

The Foundation High School Program with endorsements is a flexible program that allows students to pursue their interests. It is the default graduation program for students who entered high school in the 2014-15 school year and beyond. The program contains up to four parts:

- A 22 – credit foundation program which is the core of the new Texas high school diploma
- Five endorsement options that allow students to focus on a related series of courses
- A higher performance category called Distinguished Level of Achievement
- Performance Acknowledgments that note outstanding achievement in specific areas

Personal Graduation Plan (PGP)

A Personal Graduation plan will be created and reviewed with the student and parent or guardian entering grade nine. The personal graduation plan options reviewed will include the advantages of a distinguished level of achievement and the different endorsements. Before the conclusion of the school year, the student and the student's parent or guardian must confirm and sign a personal graduation plan for the student. A student may amend the student's personal graduation plan after the initial confirmation of the plan under this section. PGPs will identify a course of study that promotes college readiness, career placement and advancement, and transition to postsecondary education. If a student amends the student's personal graduation plan, the school shall send written notice to the student's parents regarding the change.

Distinguished Level of Achievement and Endorsements

A student may earn the Distinguished Level of Achievement and/or a Performance Acknowledgement for outstanding performance. In order to be admitted to a Texas public university under the Top 10 percent automatic admission law, the Distinguished Level of Achievement must be earned by the student.

Distinguished Level of Achievement	Performance Acknowledgements
● Foundation Program requirements; ● A total of 4 credits in math including Algebra II; ● A total of 4 credits in science; ● Successful completion of an endorsement in your area of interest.	● Dual credit course ● Bilingual and biliteracy ● PSAT, ACT ASPIRE, SAT or ACT ● Advanced Placement ● Earning a state-, nationally-, or internationally recognized business or industry certification or license

The Distinguished Level of Achievement opens educational and employment opportunities for you beyond high school.

- Allows you to compete for Top 10% automatic admissions eligibility at any Texas public university;
- Positions you among the first in line for a TEXAS Grant* to help pay for university tuition and fees; and other financial aid options
- Ensures you are a more competitive applicant at the most selective colleges and universities.
- Prepares you for college – level course work at community/technical colleges and universities.
- Provides opportunity for immediate enrollment in classes related to your chosen field of study; and
- Lays a strong foundation to successfully complete an industry workforce credential or college degree.

Grading Guidelines and Policy Procedures

This page provides information to students and parents in reference to different areas of our curriculum and guidelines and policy in place for implementation. The Sharyland ISD Guidelines & Policies are accessible through this link:

https://sharylandisd.org/departments/curriculum/guidelines___policies

High School Semester Exam Exemption Policy

https://sharylandisd.org/departments/curriculum/guidelines___policies

Grade Classifications and Graduation Requirements

All students entering high school as a freshman (9th Grade) will need to meet the following credit requirements for grade level promotion:

Graduation

Grade and Classification	Credits	Credits needed each year
12th Grade (Senior)	18+ Credits	26 Credits needed for graduation + endorsement
11th Grade (Junior)	12 – 18 Credit	18 credits needed for 12th grade classification
10th Grade (Sophomore)	6 – 12 Credits	12 credits needed for 11th grade classification
9th Grade Freshman	0 – 6 Credits	Successfully promoted to 9th grade. 6 credits needed for 10th grade classification

Course Offerings and Availability

Courses are offered according to student need and teacher availability. Campus schedules are determined by course selection and graduation requirements. Additional courses may be added to student schedules in order to facilitate STAAR End-of-Course instructional support in order to meet state graduation requirements.

Class Ranking

Class rank shall be determined by averaging all core course semester grades through the end of each year. Final senior class rank shall be determined by using the average of all core course semester grades up to and including the third semester, and the last progress report grade for the 50-minute period. Coursework completed by non-traditional correspondence, credit by examination, summer school, or off-campus dual enrollment courses shall not be included in determining class rank. High school course work completed while in Junior High shall not be included in determining class rank.

Calculating Class Rank

Grade weights shall be assigned to grades earned by high school students who entered grade 9 in the 2016–17 and beyond school year for purposes of class rank. For AP courses taken in grades 9–11, students shall receive AP (Level VI) weight only if they score a 3, 4, or 5 on the associated AP test for that course. For AP courses taken in grade 12, students shall receive full AP (Level V) upon completion of the course. Sharyland ISD's Class Ranking Chart can be found on the Sharyland ISD webpage under www.sharylandisd.org/school_board/board_policy/ through the EIC Local Policy link.

High School Block Scheduling

High School students at Sharyland ISD follow a hybrid scheduling system that includes four (4) 90-minute blocks and one (1) 50-minute block. The school year is divided into two (2) terms per semester and four (4) semesters. Each term allows students the opportunity to complete full credits in 18 weeks. Some courses may be offered for a full credit during the year-long 50-minute block.

Schedule Changes

Students may qualify for a schedule change for the following reasons only:

- Student has earned credit for the course that is currently on their schedule;
- Student does not have the prerequisite(s) for the course currently on their schedule;
- Student has been removed from a program for which approval is needed for placement;
- Student failed a course previously and is currently scheduled to take the course again with the same teacher;

- Senior student not scheduled for a course needed for graduation purposes
- Data entry error;

Master schedule changes may be affected by insufficient course enrollment or instructor availability.

Course Level Changes

Students may qualify for a course level change for the following reasons only:

Student has attended tutorials with the teacher 3 or more times prior to the course level change.

- Student has completed all work and has no missing assignments for the course.
- Teacher provides counselor and administrator documentation that the student has made a sincere effort to succeed and has not been able to earn a 70 in the course.

A campus administrator and Head Counselor will approve a course level change only if a student has complied with the criteria above, and IF there is space available in the lower level course. Students who transfer to a lower level course after the first 6 weeks are not eligible to earn the weighted points for the semester. Students who transfer to a lower level course after the 1st semester will receive the weighted points for that semester only.
Lateral course changes are not allowed (i.e., Honors English II to another Honors English II class). Only changes from AP to Honors, AP to CP, or Honors to CP are allowed by campus administration.

Credit Recovery

Students have two options for credit recovery:

- Computer-assisted instruction: Online credit recovery classes help students master previously attempted coursework, covering all necessary material through learning modules and exams. However, not all courses are eligible for this method, so students should consult their school counselor for details.

- Credit recovery through Credit by Examination (CBE): This option is applicable for course grades between 60-69. The assessment covers all class material covered. Students with excessive absences may also be eligible.

Credit by Examination (Acceleration)

Credit by exam (CBE) is one method for students to demonstrate proficiency in grade level or course content. The Texas Education Code (TEC), §28.023, allows students to either accelerate a grade level or earn credit for a course on the basis credit by examination.

A student in grades 6-12 may be awarded credit based on performance on a CBE taken either with no prior instruction. Students may not attempt to earn credit by exam for the same high school subject more than two times.

Students may take a specific examination for acceleration purposes only once during the designated testing windows as published by the district website: https://www.sharylandisd.org/departments/curriculum/Assessment

Students are advised to contact their school counselor to obtain detailed information.

Texas Virtual School Network

The TXVSN course catalog provides Texas public schools students with expanded access to high school courses. Students may take online high school, Advanced Placement, and dual credit courses selected from the catalog along with courses at their campus in order to meet their graduation plan. Students have the option to complete TXVSN courses at school, off-campus, or any location where Internet access is available. For more information, please visit" https://www.txvsn.or

Sharyland ISD Endorsements

All Sharyland ISD students must select an endorsement upon entering 9th grade. Students can earn one or more endorsements as part of their graduation requirements. Endorsements consist of a related series of courses that are grouped together by interest or skill set. They provide students with in-depth knowledge of a subject area. Students can earn an endorsement by completing the curriculum requirements for the Foundation High School Program (FHSP); and the curriculum requirements for an endorsement, including 4 credits in both math and science and 2 additional elective credits.

Students can choose from 5 endorsement areas:

Science, Technology, Engineering and Mathematics (STEM)

In addition to Algebra II, Chemistry, and Physics or Principles of Technology, courses from one of the following five categories:

• Coherent sequence of 4 or more credits in Career & Technical Education (CTE) (specific courses apply)	▪ Courses required to complete a TEA Program of Study related to STEM	▪ 3 credits in Mathematics by successfully completing Algebra II and two additional mathematics courses for which Algebra II is a prerequisite	▪ 4 credits in Science by successfully completing chemistry, physics, and two additional science courses	▪ In addition to Algebra II, Chemistry, and Physics, a coherent sequence of 3 additional credits from no more than two of the previous four STEM categories

Business and Industry

Courses from one of the following four categories:

▪ Coherent sequence of 4 or more credits in Career & Technical Education (CTE) (specific courses apply)	▪ Courses required to complete a TEA Program of Study related to Business & Industry	4 English credits in public speaking, debate, advanced broadcast journalism, advanced journalism including newspaper and yearbook	Coherent sequence of 4 credits from the previous three Business & Industry categories

Public Services

Courses from one of the following three categories:

▪ Coherent sequence of 4 or more credits in Career & Technical Education (CTE) (specific courses apply)	▪ Courses required to complete a TEA Program of Study related to Public Services	4 courses in Junior Reserve Officer Training Corps (JROTC)

Arts and Humanities

Courses from one of the following six categories:

▪ 5 Social Studies Credits	▪ 4 levels of the same languages other than English (LOTE)	▪ 2 levels of the same languages other than English (LOTE) and 2 levels of a different LOTE	▪ 4 levels of American Sign Language (ASL)	▪ Coherent sequence of 4 credits from one or two categories in fine arts	▪ 4 English credits (specific courses apply)

Multi-Disciplinary Studies

Courses from one of the following three categories:

▪ 4 Advanced Courses from one or among endorsement areas	▪ 4 credits in each foundation subject area to include Chemistry and/or Physics and English IV or a comparable AP or IB English course	4 credits in Advanced Placement, International Baccalaureate, or Dual Credit selected from English, Mathematics, Science, Social Studies, Economics, LOTE, or Fine Arts

Career Exploration Program

Pathful Explore

Pathful Explore empowers our students to discover, plan and pursue their dreams using a unique video-based career planning platform. The interactive tools help students and job seekers develop career paths based on choice, not chance. Students can use this tool to learn more about themselves and develop their academic and career plans. The key features this tool offers includes:

- Career Central
  - This is where all of the career profiles are located allowing students to explore specific careers by choosing from a range of industries and fields. There is an extensive collection of careers and job shadowing videos, which include closed captioning and transcripts in both English and Spanish.
- College Search
  - Search and/or research post-secondary institutions that can offer the career or degree program students are interested in.
- Job Search
  - Search and/or research jobs, internships, and work-based learning experiences that are available in your area.
- Career Assessments
  - Interest assessments provide our students with more insight into themselves and help to guide the career exploration process. Students are encouraged to obtain these results first and then explore their career possibilities!
- Resume Builder
- Postsecondary Plan Builder
- Goal Setting

Each student has access to a personal account. Visit our CTE website and click on the Pathful Explore link located on the left hand side of the menu bar for instructions on how to log on.

Our students have access to this career exploration platform 7th – 12th grades. Counselors schedule classroom lessons to speak to students about careers and to administer the interest inventories. This information helps students be better informed as they select the endorsement, career cluster, and Program of Study they are going to pursue in high school. Students and parents will confirm the endorsement and periodically meet with their assigned School Counselor and CTE Counselor to ensure they are on track in fulfilling their endorsement, Program of Study, and high school graduation requirements.

Go Center

The Go Center at Sharyland High School, Sharyland Pioneer High School and Sharyland Advanced Academic Academy is equipped to assist all Sharyland ISD students with post-secondary needs such as financial aid, scholarships, testing (ACT/SAT, TSI), high school transcripts, and so much more.

Sharyland High School Go Center Counselor Elizabeth Rios (956) 580 – 5300 ext. 1211	Pioneer High School College and Financial Aid Advisor Melinda Zuniga (956) 271-1600 ext. 4027	Sharyland Advanced Academic Academy CTE College and Career Readiness Advisor Janet Amaro (956) 584-6467 ext. 4426

Special Programs

English Language Learners

Speaking a second language has numerous benefits in today's globalized society. Bilingualism can improve competitiveness in the job market, open career opportunities, increase the potential to earn more money, open social and cultural opportunities, give a new perspective, improve problem-solving, multitasking and decision- making.
The state of Texas requires that every student in the state who has a home language other than English and is identified as Limited English Proficient (LEP) be provided the opportunity to participate in an English as a second language (ESL) program. The ESL program emphasizes the mastery of English language skills within content- based instruction through individualized instructional approaches such as sheltered instruction.

Sharyland ISD implements the Content-Based ESL Model in which teachers provide supplementary instruction for all content areas by integrating ESL instruction with subject matter instruction that focuses on learning a second language using English as a medium to learn math, science, social studies, and other academic subjects. Teachers are ESL Certified and/or have received professional development in Sheltered Instruction.
Each campus has a Language Proficiency Assessment Committee (LPAC) that reviews student data to determine language proficiency levels of English Learners (ELs). The committee consists of a campus administrator, an ESL Teacher, and a parent of a current EL. The LPAC recommends courses according to the EL's proficiency level and academic achievement to provide additional support as the student gains proficiency in English.

In recognition of the benefits of attaining proficiency in two or more languages, Texas offers students the opportunity to earn a Performance Acknowledgement in Bilingualism and Biliteracy by meeting specific state criteria. This accolade must be clearly indicated on the student's diploma and transcript. The following support is provided to ensure ELs continue to progress:

District Support

- Provide professional development opportunities for campus staff
- Provide state required training for LPACs
- Provide additional funds for staff, programs, materials, and professional development
- Provide guidance and support to campus administrators, teachers, and parents/guardians
- Provide a district-wide electronic system, Project ELL, to monitor progress for each English Language Learner

Campus Support

- Courses that assist ELs with second language acquisition
- Courses that provide additional support for success on state assessments
- Computer programs that individualize instruction for ELs (may vary by campus)
- Achieve 3000 – to improve comprehension of nonfiction reading and develop writing skills
- ESL Reading Smart – to develop English language proficiency with an emphasis on literacy and academic language development
- My Virtual Reading Coach – to improve decoding and reading comprehension (not limited to ELs)
- Read180 – to master critical reading skills (not limited to ELs)
- Rosetta Stone – to learn a second language

Section 504

The Rehabilitation Act of 1973, reauthorized in 2008, commonly referred to as "Section 504," is a non-discrimination statute enacted by the United States Congress. Under Section 504, an individual with a disability (also referred to as a student with a disability in the elementary and secondary education context) is defined as a person who: (1) has a physical or mental impairment that substantially limits a major life activity; (2) has a record of such an impairment; or (3) is regarded as having such an impairment.

The determination of whether a student has a physical or mental impairment that substantially limits a major life activity (and therefore has a disability) must be made on a case by case basis. In addition, when determining if someone meets the definition of a disability, the definition must be understood to provide broad coverage of individuals.

Physical or mental impairments. Section 504 defines a physical or mental impairment as any

- Physiological disorder or condition,
- Cosmetic disfigurement, or
- Anatomical loss affecting one or more of the following body systems: neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive; digestive; genitourinary; hemic and lymphatic; skin; and endocrine.

The Section 504 definition of physical and mental impairment also includes any mental or psychological disorder. The definition does not include all specific diseases and conditions that may be physical or mental impairments because of the difficulty of ensuring the completeness of such a list. The purpose of the Act is to prohibit discrimination and to ensure that students with disabilities have educational opportunities and benefits equal to those provided to other students. An eligible student under Section 504 is a student who has a physical or mental impairment that substantially limits them in a major life activity such as learning, self-care, walking, seeing, hearing, speaking, reading, concentrating, breathing, working and performing manual tasks. See the campus 504 Coordinator for more information about services for qualifying students. For more information on Section 504, please visit this website: https://www2.ed.gov/about/offices/list/ocr/docs/504-resource-guide-201612.pdf

Special Education Services

Students with disabilities have the opportunity to participate in educational programs and activities with students without disabilities. The school district curriculum enables each student with disabilities to acquire content knowledge and skills commensurate with the student's needs and abilities. These skills may be attained in the general program of instruction or through special education modification, accommodation or instruction and related services, as determined by the Admission, Review, and Dismissal (ARD) Committee. Based on a student's Individualized Education Program (IEP), students may take specific courses to meet graduation requirements.

If a student has or is suspected of having a disability and requires specially designed instruction that can only be provided through special education, please contact a campus guidance counselor for information concerning the special education referral process.

College and Career Readiness Programs

College and Career Readiness programs provide students with a successful transition from high school to college or career. These programs provide students with the opportunity to gain the skills, knowledge, and experience necessary for postsecondary success. Sharyland ISD provides a variety of programs to fit different post-secondary interests. All high school students are encouraged to participate in college and career readiness programs that provide high academic rigor. Students who participate in advanced level course work while in high school, are more likely to graduate from a college or university.

Advanced Placement

With AP®, students can take college-level course work in high school. When students take AP courses and exams, they demonstrate to college admission officers that they have sought out an educational experience that will prepare them for success in college and beyond. Performing well on an AP Exam means more than just the successful completion of a course. Most colleges and universities accept successful exam scores for credit, advanced placement, or both. Research consistently shows that students who are successful in AP typically experience greater academic success in college than those who don't participate in AP. Formal identification of Gifted and Talented (GT) is *not required* to participate in Honors and/or AP courses. To learn more about Honors or AP courses, please visit: https://apstudent.collegeboard.org/exploreap/the-ap-experience

Dual Credit Core Complete

Core academic courses are general education courses required for any student who plans to pursue a traditional associate or baccalaureate degree in Texas. Dual Credit core academic credits earned at public institutions of higher education are transferable to Texas public colleges and universities and may be applicable to a student's Associate of Arts (AA) or Associate of Science (AS), and baccalaureate degrees. See the Texas General Education Core Curriculum WebCenter for more information.

As part of the Dual Credit Core Complete Option, students will receive college credit and high school credit simultaneously, can graduate from high school with transferable college credits, and save on tuition and fees by reducing the time to complete a degree. Students can also fast track their undergraduate or workforce degrees, and will have access to a full range of college student support services while in high school to aid them in a smooth transition to college after graduation.

Career and Technical Education

Career and Technical Education (CTE) programs offer a sequence of courses that provide students with coherent content. CTE content is aligned to challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions. Various of our CTE programs offer students the opportunity to earn industry-based certifications and to participate in work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

Sharyland ISD students can participate in one or a combination of the following programs:

- Advanced Placement Scholar Academy
- Dual Credit Core Complete Academy (42 college hours while in high school)
- Career and Technical Education (CTE) Program

All college and career readiness programs at Sharyland ISD are designed to provide students with skills needed to engage in an academically sound and rigorous course of study. These courses, academies, and programs serve as the precursor for post-secondary transition. Therefore, students must be aware that each college and career readiness program comes with significant requirements. Some examples of these requirements may be more study time or additional coursework than in previous years. Students participating in extra-curricular courses in conjunction with academies or advanced placement programs must also take into consideration the amount of time needed to be successful at each. It is important that students visit with their school counselor prior to participating in any program.

Sharyland ISD Advanced Placement Scholar Academy

Sharyland ISD offers an additional incentive for those students who choose to pursue the AP program through the AP Scholar Academy. The AP Scholar Academy offers a rigorous, relevant and challenging Advanced Placement curriculum for high school students. The curriculum is aligned to College Board standards and expectations. Students enrolled in the AP Scholar Academy will participate in AP courses that challenge them to expand their knowledge, increase their skills, and dig deeper into their subject matter.
Students who are motivated to challenge themselves academically will develop the requisite skills needed to achieve success in AP courses, improve SAT & ACT scores, and establish the academic foundation necessary to be successful in a 2- or 4- year university program.

Why the Sharyland ISD AP Scholar Academy?

The Sharyland ISD AP Scholars Academy is designed for students seeking a rigorous and advanced curriculum throughout their high school career, as well as providing the opportunity for becoming a well-rounded student. The AP Scholars Academy will offer students the following services:

- Challenging courses of study to include Honors and Advanced Placement courses
- Supportive framework for students willing to tackle advanced courses
- Opportunities for students to participate in other academic and extracurricular activities
- SAT and ACT test preparation
- Additional GPA points for class ranking with every AP core subject test score of 3, 4, or 5
- Special recognition on diploma and graduation ceremony

Sharyland ISD students only: For AP courses taken in grades 9–11, students shall receive AP (Level VI) weight only if they score a 3, 4, or 5 on the associated AP test for that course. For AP courses taken in grade 12, students shall receive full AP (Level V) upon completion of the course.

General Requirements

- Meet all graduation requirements as specified by the district and state
- Requirements for various levels are specified in the chart on following page

Graduation Accolades

- SISD AP Scholar Stole (all levels)
- White graduation gown for AP Scholars with Distinction and above

Sharyland ISD AP Scholar Academy

	SISD AP Scholar	SISD AP Scholar with Honor	SISD AP Scholar with Distinction
Minimum Advanced Placement Requirements	Score 3 or higher on three or more AP exams	Receive an average score of at least 3.25 on all AP exams and scores of 3 or higher on four or more exams	Receive an average score of at least 3.5 on all AP exams and scores of 3 or higher on five or more exams
Additional Requirements	2 additional AP-level courses in any subject	4 additional AP-level courses in any subject	Students complete at least one additional AP course in each of the 4 core subject areas
	Maintain a minimum GPA of 3.2 as per final GPA ranking	Maintain a minimum GPA of 3.4 as per final GPA ranking	Maintain a minimum GPA of 3.4 as per final GPA ranking
	Participation and commitment in at least one school sponsored organization, UIL, or other competitive extracurricular program for at least two years	Participation and commitment in at least one school sponsored organization, UIL, or other competitive extracurricular program for at least two years	Participation and commitment in at least one school sponsored organization, UIL, or other competitive extracurricular program for at least two years

For more information about AP Scholar, please contact your campus counselor.

Dual Credit Opportunities for Sharyland ISD Students

Dual enrollment, or more commonly known as *Dual Credit*, is the process of enrolling in college courses and using those classes as credit toward high school graduation. The dual credit program allows eligible high school students to enroll in college courses while attending high school. Courses are taken in place of, or in addition to the normal course load in high school. High school students admitted to the program must meet the same requirements as all other college students.

Students must also meet the TSI standards for college readiness, or be TSI exempt in order to enroll in academic courses. College credit is earned upon successful course completion and may be applied towards an associate's degree at STC or may transfer to other colleges and universities. For more information on Dual Credit, please visit: https://catalog.southtexascollege.edu/general-admissions/dual-enrollment/.

The college credit earned may help students earn a post-secondary certificate or associate's degree from South Texas College. Upon successful completion of college courses or college hours, the certificate or associate's degree may transfer to other institutions of higher education.

Students enrolled with Sharyland ISD have two (2) Dual Credit opportunities:

Sharyland ISD Dual Credit Core Complete Academy

This option is offered at Sharyland High School and Sharyland Pioneer High School. Dual Credit Core Complete provides students the opportunity to earn up to 42 college credit hours in the general core curriculum while in high school. The requirements to qualify are as follows:

- Meet Honors Course Standards and successfully complete two (2) Honors core courses during freshman (9th grade) year.
- Submit a completed Apply Texas Application online at http://www.applytexas.org indicating Dual Credit.
- Take and successfully pass the Texas Success Initiative (TSIA 2.0) assessment (or TSI exemption scores).

  Passing scores are as follows:
  - MATH: CRC score of 950-990 or, CRC score of 910-949 with a Diagnostic Level of 6.
  - ELAR: CRC score of 945-990 with an Essay of 5-8 or, CRC score of 910-944 with a Diagnostic Level of 5-6 and an Essay of 5-8.
- You are TSI exempt if you submit verification that you have completed one of the following:
  - ACT: 23 Composite with a 19 English and 19 Math
  - SAT: score of 480 on the Evidence-Based Reading and Writing (EBRW) test; a minimum score of 530 on the Mathematics section. (There is no combined score if SAT was administered after March 5, 2016)

Visit the Go Center for details and to sign-up for the TSIA 2.0

IMPORTANT:

Students MUST maintain a 2.0 grade point average in ALL college courses. Any grade below a "C" will result in permanent removal from the program.

Career and Technical Education

The Sharyland ISD Career and Technical Education (CTE) Department offers various programs that enable our students to prepare for college and careers. These programs consist of a sequence of courses related to specific areas of focus, also known as career clusters, each providing students with coherent and rigorous content. CTE content is aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare students for further education and careers in current or emerging professions. The CTE career clusters we currently offer are:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio Visual Technology, and Communications
- Business, Management, and Administration
- Education and Training
- Finance
- Health Science
- Hospitality and Tourism
- Human Services
- Law, Public Safety, Corrections, and Security
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics

The Sharyland ISD Career and Technical Education (CTE) Department provides direction and leadership for all CTE programs in the district. It focuses on: ensuring the implementation of the CTE Texas Essential Knowledge and Skills (TEKS); ensuring that adequate equipment and materials are readily available for the delivery of instruction; offering a wide array of college and career events; developing and maintaining business/community partnerships; and overall, on improving our established CTE programs.

Curriculum and Instruction

The Curriculum Division provides state-level support, information and non-regulatory guidance to school administrators, teachers, counselors, parents, and students about general curriculum laws and rules, particularly with respect to graduation requirements, options for offering courses, and the award of credit.

The division is responsible for supporting development and implementation of the Texas Essential Knowledge and Skills in the foundation curriculum (English language arts, mathematics, science, and social studies) and the enrichment curriculum (career and technical education, fine arts, health education, languages other than English, and physical education).

Texas Essential Knowledge and Skills by Chapter

Chapter 110. English Language Arts and Reading; Adopted 2017
Chapter 111. Mathematics
Chapter 112. Science
Chapter 113. Social Studies
Chapter 114. Languages Other Than English
Chapter 115. Health Education
Chapter 116. Physical Education
Chapter 117. Fine Arts
Chapter 127. Career Development
Chapter 128. Spanish Language Arts and English as a Second Language
Chapter 130. Career and Technical Education

English Language Arts

English I

English I Honors

English II

English II Honors

English for Speakers of Other Languages I

English for Speakers of Other Languages II

English III

English III Honors

AP English Language and Composition (III)

English III Dual Credit

English IV

English IV Honors

AP English Literature and Composition (IV)

English IV Dual Credit

Newcomers English Language Development (NELD A & B)

Reading I – III

Creative Writing

Journalism I

Advanced Journalism I - III

Debate I - III

College Preparatory ELAR (HB5)

Practical Writing

It is Sharyland ISD's intent to offer all courses in this catalog. Some courses may not be offered if sufficient student interest of enrollment is not evident. Instructor availability may also impact course offerings.

English I — TEA # 03220100 — Course #0122

Recommended Grade Placement: 9

Credit: 1

English I incorporates written and oral communication skills through the study of reading, writing, and research. Students practice a variation of written tasks in a variety of genres while utilizing descriptive, narrative, persuasive, and expository techniques. Students learn skills in revising and editing, and the correct use of the conventions and mechanics of written English. Students also study literature which includes but is not limited to short stories, poetry, mythology, biographies, and Shakespearean plays. Students read multiple genres in depth by analyzing works, and interpreting the historical and cultural influence in each context. Students are assigned outside reading and writing assignments. This course requires successful performance on the STAAR End-of-Course assessment for graduation.

English I Honors — TEA # 03220100 — Course # 0120

Recommended Grade Placement: 9

Credit: 1

English I Honors covers English I curriculum with an emphasis in critical thinking skills, analysis, and synthesis. These are all essential in preparing students for the AP Language and Literature courses. This course integrates the skills necessary for the STAAR English I End-of-Course assessment, and prerequisite skills for Advanced Placement English Language Arts courses in 11^{th} and 12^{th} grade. Students will practice a variety of written tasks including research, literary analysis, revising and editing, and incorporate the correct use of conventions and mechanics of written English. English I Honors requires creative thinking in both individual and cooperative settings. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework. This course requires successful performance on the STAAR English I End-of-Course examination for graduation.

English II — TEA # 03220200 — Course # 0132

Recommended Grade Placement: 10

Credit: 1

English II emphasizes reading and writing across all genres and continues the refinement of reading, writing, and research skills as learned in English I. Students use the writing process to produce effective arguments to include the research process and information from primary and secondary sources. Students will read critically by analyzing and responding to a variety of literary genres. Students will interpret the possible historical and cultural influences in literature. Students will also critique oral communications including media literacy and analyze the author's purpose and the effect on the audience. This course requires successful performance on the STAAR English II End-of-Course assessment for graduation.

English II Honors — TEA # 03220200 — Course # 01

Recommended Grade Placement: 10

Credit: 1

English II Honors provides an enhanced version of the English II curriculum that will help students build on prior knowledge and further prepare for Advanced Placement Language and Literature courses. English II Honors includes advanced mechanics, syntax, usage and vocabulary. Students analyze discourse in persuasive and informational texts and gain exposure to AP reading and writing strategies and AP writing prompts. The course requires critical reading of a variety of classic and contemporary literature with an emphasis in literary and rhetorical analysis and synthesis of author’s style and purpose. Written compositions require the use of revising and editing skills and the use of technology to research topics and publish essays. Students will also use technology and visuals to produce a variety of oral and media communications. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework. This course requires successful performance on the STAAR English II End-of-Course assessment for graduation.

English for Speakers of Other Languages I TEA# 03220100 Course # 0126

Recommended Grade Placement: 9
Credit: 1
Prerequisite: LPAC Recommendation

ESOL I enables non-English speaking students to acquire sufficient beginning vocabulary to develop comprehension skills to communicate with English speakers. Instruction begins with a focus on listening and speaking while reading and writing skills are developed simultaneously as the student develops an increased level of English. Students will develop literacy skills to accelerate learning in language arts as well as other content areas. This course requires successful performance on the STAAR English I End-of-Course assessment for graduation.

English for Speakers of Other Languages II TEA# 03220200 Course # 0136

Recommended Grade Placement: 10; Prerequisite LPAC Recommendation
Credit: 1

ESOL II enables the limited English-speaking student at the intermediate or advanced level to continue to increase and refine language skills. ESOL students read a variety of texts to develop an increased level of understanding of English. Students will write in a variety of forms with increased accuracy to address a specific purpose and audience in language arts as well as other content areas. This course requires successful performance on the STAAR English II End-of-Course assessment for graduation.

English III TEA # 03220300 Course # 0142

Recommended Grade Placement: 11
Credit: 1

English III continues to increase and refine students' written and oral communication skills, building on reading, writing, and research skills they developed in English I and English II. English III involves an intensive study of advanced usage of critical reading and writing skills, and vocabulary. The course will draw on a variety of literary genres including literary texts, informational texts, and literary essays. Students will analyze the works and interpret the possible historical and cultural influence in literature. Students will write analytical essays, including a documented research paper and use technology to revise, edit, and publish compositions. Students will present and critique oral communications and multimedia products

English III Honors TEA # 03220300 Course # 0148

Recommended Grade Placement: 11
Credit: 1

English III Honors provides an emphasis in critical analysis of texts through reading, writing, and media. This course will include more challenging literature and will integrate higher order and critical thinking skills through thought-provoking questions, concepts, and research topics. Students will compose a variety of written texts with a clear controlling idea, coherent organization and detail. In English III Honors, students are expected to know how to locate a range of relevant sources and evaluate, synthesize, and present ideas and information. Students are required to work as self-directed learners who can work both independently and collaboratively.

English III Dual Credit TEA # 03220300 Course # 0140D

Recommended Grade Placement: 11
Credit: 1
Prerequisite: English I and English II; Met South Texas College acceptance criteria

STC ENGL 1301 Composition I - This course is an intensive study of and practice in writing processes, from intervention and research, to drafting, revision, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis.

STC ENGL 1302 Composition II Rhetoric - (*Prerequisite: "C" or better in English 1301)* - This course is an intensive study of and practice in the strategies and techniques for developing research-based expository, argumentative, and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and

secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.

AP English Language and Composition TEA # A3220100 Course # 0141

Recommended Grade Placement: 11
Credit: 1
College Board Recommended Prerequisite: There are no prerequisites for the courses, but students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
AP Language and Composition emphasizes the analysis of a variety of literary and nonfiction texts with particular attention to the writer's style, diction, syntax, argumentation and logic. The AP English Language and Composition course requires students to become skilled readers of prose written in a variety of rhetorical contexts as well as become skilled writers who compose for a variety of purposes. Students will become aware of interactions among a writers' purposes, an author's propositional content, genre conventions, and the resources of language that contribute to effectiveness in writing. Students also write their own refined arguments and synthesize arguments from different sources and understand the elements and dynamics of rhetorical theory. Students practice research skills and long-term project management that will be required in college classes. The intentional rigor implemented in this course is to prepare students for advanced placement (AP) assessments and college level coursework. This course will follow the AP English Language and Composition Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

English IV TEA # 03220400 Course # 0154

Recommended Grade Placement: 12
Credit: 1
English IV connects all high school English courses and continues the refinement process of necessary skills for effective reading, writing, speaking, and listening for post-secondary readiness. This course emphasizes the use of critical thinking skills, the use of rhetorical strategies in student's writing, and the study of major works in a variety of genres. The students will be connecting historical content, major themes and concepts from multiple genres to produce written assignments. Students will use technology to revise, edit, and produce text and research for documentation.

English IV Honors TEA # 03220400 Course # 0158

Recommended Grade Placement: 12
Credit: 1
English IV Honors is designed to focus on preparation for college level reading and writing with an emphasis in higher level and critical thinking skills. Students will compose a variety of written texts, with a clear thesis statement, coherent organization, and significant detail. Students will also research a range of relevant topics, evaluate sources, and present ideas and information throughout the course in different forms. Students will also employ oral and written conventions where students will address standards from English I, English II, and English III. The English IV Honors course requires that students work as self-directed learners, who can work both independently, and collaboratively. This course is a culmination of all high school levels of English, with advanced support and preparation to meet the postsecondary expectations.

English IV Dual Credit TEA # 03220400 Course # 0151D

Recommended Grade Placement: 12
Credit: 1
Prerequisite: Met South Texas College acceptance criteria; a grade of " C" or better in both ENGL 1301 and ENGL 1302
STC ENGL 2321 British Literature- This course is a survey of the development of British literature from the Anglo-Saxon period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions.
STC ENGL 2341 Introduction to Forms of Literature – (*Prerequisite: "C" or better in ENGL 1301 and ENGL 1302)*- This course is the study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Students will study works of prose, poetry, drama, and fiction in relation to literary periods, terms, and criticism. Texts will be selected from a diverse group of authors and traditions.

AP English IV Literature and Composition TEA # A3220200 Course # 0150

Recommended Grade Placement: 12
Credit 1

College Board Recommended Prerequisite: There are no prerequisites for the courses, but students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.

AP English Literature and Composition is a course that engages students in the careful reading and critical analysis of imaginative literature. Through close reading of selected texts, students deepen their understanding of the ways writers use language to provide meaning for their readers. Throughout the course, students will consider a work's structure, style and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. Students will analyze literary elements and writer's style related to purpose, audience, and theme. The intentional rigor implemented in this course is to prepare students for advanced placement (AP) assessments and college level coursework. This course will follow the AP English Literature and Composition Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

Newcomers English Language Development TEA # 03200800 Course # 0108

Recommended Grade Level: 9 Credit: 1

Newcomers English Language Development (NELD A&B) courses are designed to provide instructional opportunities for secondary level recent immigrant students with little to no English proficiency. The development of communicative competence occurs through targeted lessons based on students' needs.

Reading I, II, III TEA # 03270700 (I); 03270800 (II); 03270900 (III) Course # 0103 (I), 0104 (II), 0107 (III)

Recommended Grade Levels: 9 – 12 Credit: 1

Reading I-III are courses where students apply a variety of word recognition strategies and build an extensive vocabulary through systematic word study. They read silently and orally with fluency and build comprehension in increasingly demanding texts. Various strategies are used to comprehend, analyze, and evaluate texts. Students will create personal responses to a variety of texts reflecting diverse cultures and research topics of interest by reviewing and evaluating print and non-print sources.

Creative Writing TEA # 03221200 Course # 0125

Recommended Grade Levels: 10 – 12
Credit: 1

The study of creative writing allows high school students to earn one-half to one credit while developing versatility as a writer. Creative Writing, a rigorous composition course, asks high school students to demonstrate their skill in such forms of writing as fictional writing, short stories, poetry, and drama. All students are expected to demonstrate an understanding of the recursive nature of the writing process, effectively applying the conventions of usage and the mechanics of written English. The students' evaluation of their own writing as well as the writing of others ensures that students completing this course are able to analyze and discuss published and unpublished pieces of writing, develop peer and self-assessments for effective writing, and set their own goals as writers.

Journalism I, II, III TEA # 03230100 (I), 03230140 (II), 03230150 (III) Course # 0168(I), 0169 (II), 0170 (III)

Recommended Grade Levels: 9 – 12
Credit: 1 per course
Students enrolled in Journalism I write in a variety of forms for a variety of audiences and purposes. High school students enrolled in this course are expected to plan, draft, and complete written compositions on a regular basis, carefully examining their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. In Journalism I, students are expected to write in a variety of forms and for a variety of audiences and purposes. Students will become analytical consumers of media and technology to enhance their communication skills. Published work of professional journalists, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students enrolled in Journalism will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principles of publishing.

Advanced Journalism — TEA # 03230110 (I); 03230120 (II); 03230130 (III) Course # 0160 (I), 0162 (II), 0164 (III)

Recommended Grade Levels: 9 – 12
Credit: 1 per course
Students enrolled in Advanced Journalism: Yearbook I, II, III communicate in a variety of forms such as print, digital, or online media for a variety of audiences and purposes. High school students are expected to plan, draft, and complete written and/or visual communications on a regular basis, carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics of written English. In Advanced Journalism: Yearbook I, II, III, students are expected to become analytical consumers of media and technology to enhance their communication skills. In addition, students will apply journalistic ethics and standards. Published works of professional journalists, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students enrolled in Advanced Journalism: Yearbook I, II, III, will refine and enhance their journalistic skills, research self-selected topics, and plan, organize, and prepare a project(s) in one or more forms of media.

Debate I, II, III — TEA # 03240600 (I); 03240700 (II); 03240800 (III) Course # 0188 (I), 0190 (II), 0192 (III)

Recommended Grade Levels: 9 – 12
Credit: 1 per course
Controversial issues arise in aspects of personal, social, public, and professional life in modern society. Debate and argumentation are widely used to make decisions and reduce conflict. Students who develop skills in argumentation and debate become interested in current issues, develop sound critical thinking, and sharpen communication skills. They acquire life-long skills for intelligently approaching controversial issues.

College Preparatory ELAR HB5 — TEA # CP110100 — Course # 0925

Recommended Grade Level: 12
Credit: 1
This course is created in partnership with at least one institute of higher education to assist students with meeting college readiness in ELA. It is designed for students at the 12th grade whose performance on coursework or college entrance exams indicates that they may need additional support to perform entry-level college coursework. Students must obtain a 70 in the class and on the cumulative assessment of the course to receive credit for the course. *Note: This course will satisfy the fourth English Language Arts credit for graduation. Although College Preparatory ELA is a state approved ELA elective credit, most colleges and universities will not accept it for admission purposes and may request students take the TSIA.*

Practical Writing — TEA # 03221300 — Course # 0123

Recommended Grade Levels: 9 – 12
Credit: 0.5 – 1
The study of writing allows high school students to earn one-half to one credit while developing skills necessary for practical writing. This course emphasizes skill in the use of conventions and mechanics of written English, the appropriate and effective application of English grammar, the reading comprehension of informational text, and the effective use of vocabulary. Students

are expected to understand the recursive nature of reading and writing. Evaluation of students' own writing as well as the writing of others ensures that students completing this course are able to analyze and evaluate their writing.

Mathematics Courses

Algebra I
Algebra I Honors
Algebra I ESL
Algebra I Extended
Geometry
Geometry Honors
Mathematical Models with Applications
Algebra II
Algebra II Honors
Advanced Quantitative Reasoning
Pre-Calculus
Pre-Calculus Honors/College Algebra Dual Credit
AP Calculus AB
AP Calculus BC
AP Statistics
Statistics Dual Credit
Calculus I Dual Credit
Calculus II Dual Credit
College Preparatory Math (HB5)
Digital Electronic Honors (CTE Program Course)
Accounting II Honors (CTE Program Course)

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Algebra I — TEA # 03100500 — Course # 0362

Recommended Grade Placement: 9

Credit: 1

Algebra I extends comprehension of number and algebraic methods from grades 6-8, and integrates graphing, solving linear functions, and understanding equations and inequalities. Students are expected to describe, graph, write, and solve quadratic functions and equations, understand exponential functions, polynomials, radical expressions, sequences, and laws of exponents. Students will apply solutions to explore data and analyze statistical relationships in both the classroom and real-world scenarios. In Algebra I, there is additional emphasis in problem solving using real objects, manipulatives, paper and pencil, technology, mental math, estimation, and number sense, multiple representations, and applications of mathematical skills and concepts which connect to all other math courses in high school. This course requires successful performance on the STAAR Algebra I End-of-Course assessment for graduation.

Algebra I Honors — TEA# 03100500 — Course # 0361

Recommended Grade Placement: 9

Credit: 1

Honors Algebra I serves as a foundation for all upper level and advanced placement mathematics courses, and initiates specific focus on mastery of linear, quadratic, and exponential functions. Students are expected to understand each function as it operates within transformations, equations, and associated solutions in both the classroom and real-world scenarios. Students will study polynomials, radical expressions, sequences, and laws of exponents and are expected to describe, graph, write, and solve linear systems with two or more equations or variables, and create new functions through transformations. Honors Algebra I includes a more in-depth study of Algebra I curriculum with additional emphasis on critical thinking and high-level problem-solving skills. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework. This course requires successful performance on the STAAR Algebra I End-of-Course assessment for graduation.

Algebra I ESL — TEA # 03100500 — Course # 0363

Recommended Grade Placement: 9

Credit: 1

Prerequisite: LPAC Recommendation

Algebra I ESL extends comprehension of number and algebraic methods from grades 6-8, integrates graphing, solving linear functions, and understanding equations and inequalities with specific reinforcement in English language development. Students are expected to describe, graph, write, and solve quadratic functions and equations, understand exponential functions, polynomials, radical expressions, sequences, and laws of exponents at each student's pace. The teacher will implement Sheltered Instruction Observation Protocol (SIOP) strategies as part of the student's daily instruction to reinforce language acquisition and mathematical concepts. Students will apply solutions to explore data and analyze statistical relationships in both the classroom and real-world scenarios. In Algebra I, there is additional emphasis in problem solving using real objects, manipulatives, paper and pencil, technology, mental math, estimation, and number sense, multiple representations, and applications of mathematical skills and concepts which connect to all other math courses in high school. This course requires successful performance on the STAAR Algebra I End-of-Course assessment for graduation.

Geometry — TEA # 03100700 — Course # 0370

Recommended Grade Placement: 10

Credit: 1

Prerequisite: Algebra I

In Geometry, students will build on the knowledge and skills for mathematics from Kindergarten-Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Within the course, students will begin to focus on more precise terminology, symbolic representations, and the development of proofs. Students will explore concepts covering coordinate and

transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry strand. Using patterns to identify geometric properties, with an emphasis in probability and statistics in the college and career readiness standards

Geometry Honors TEA# 03100700 Course # 0372

Recommended Grade Placement: 9, 10
Credit: 1
Prerequisite: Algebra I
In Geometry Honors, students will build on the knowledge and skills for mathematics in Kindergarten- Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Within the course, students will begin to focus on more precise terminology, symbolic representations, and the development of proofs. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry strand. Using patterns to identify geometric properties, with an emphasis in probability and statistics in the college and career readiness standards. Students will also learn mathematical areas of probability and statistics in geometry as preparation for college entrance exams. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework.

Mathematical Models with Applications TEA# 03102400 Course # 0388

Grade Placement: 11, 12
Credit: 1
Prerequisite: Algebra I
Mathematical Models with Applications is designed to build on the knowledge and skills for mathematics in Kindergarten- Grade 8 and Algebra I. This mathematics course provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions. Students will select from tools such as physical objects; manipulatives; technology, including graphing calculators, data collection devices, and computers; and paper and pencil and from methods such as algebraic techniques, geometric reasoning, patterns, and mental math to solve problems.

Algebra II TEA# 03100600 Course # 0382

Grade Placement: 9-11
Credit: 1
Prerequisite: Algebra I
Algebra II integrates Algebra I and Geometry concepts as students are introduced to Algebra II content curriculum in quadratic functions, exponential functions, and systems of equations. In Algebra II, students will also build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods. Algebra II is a prerequisite course for most fourth-year mathematics courses and carries mathematical concepts that connect to the college and career readiness pathway.

Algebra II Honors TEA# 03100600 Course # 0380

Grade Placement: 9-11
Credit: 1
Prerequisite: Algebra I
Algebra II Honors integrates Algebra I and Geometry concepts as students are introduced to Algebra II content curriculum in quadratic functions, exponential functions, and systems of equations. In Algebra II, students will also build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of quadratic functions,

exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods. Algebra II Honors carries mathematical concepts that focus on additional Algebra II concepts to prepare students for dual credit, advanced placement (AP), and college level coursework.

Advanced Quantitative Reasoning TEA # 03102510 Course # 0389

Grade Placement: 11
Credit: 1
Prerequisite: Geometry; Algebra II
Advanced Quantitative Reasoning teaches students how to develop and apply skills necessary for college, careers, and life. Course content consists primarily of applications of high school mathematics concepts to prepare students to become well-educated and highly informed 21st century citizens. Students will develop and apply reasoning, planning, and communication to make decisions and solve problems in applied situations involving numerical reasoning, probability, statistical analysis, finance, mathematical selection, and modeling with algebra, geometry, trigonometry, and discrete mathematics.

Pre-Calculus TEA # 03101100 Course # 0392

Grade Placement: 11, 12
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II
Pre-calculus is a course that prepares students for calculus and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Pre-calculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems.

Pre-Calculus Honors TEA # 03101100 Course # 0390

Grade Placement: 11, 12
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II
Pre-Calculus Honors is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Pre-calculus Honors deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Pre-Calculus Honors connects algebra and trigonometry and establishes the foundation necessary for College Algebra, Calculus AB, and Calculus BC. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework.

Pre-Calculus Honors / College Algebra DC TEA # 03101100 Course # 0397D

Grade Placement: 11
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II; Met South Texas College acceptance criteria
Pre-calculus Honors is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Pre-calculus Honors deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems. Pre-Calculus Honors

connects algebra and trigonometry and establishes the foundation necessary for College Algebra, Calculus AB, and Calculus BC. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework.

STC MATH 1414 College Algebra- This course is the study of quadratic, polynomial, rational, logarithmic and exponential functions and includes the study of systems of equations and matrices. The focus of the course is the discovery and application of algebraic techniques, including graphing, to solve related equations. Additional topics may include sequences and series.

AP Calculus AB | TEA # A3100101 | Course # 0396

Grade Placement: 11, 12
Credit: 1
College Board Recommended Prerequisites: Before studying calculus, all students should complete four years of secondary mathematics designed for college-bound students: courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions.
AP Calculus AB is designed to develop mathematical knowledge conceptually, by guiding students to connect topics and representations throughout each course and apply strategies and techniques to accurately solve diverse types of problems. The curriculum for AP Calculus AB is the equivalent to that of a first-semester college calculus course. AP Calculus AB is structured around three big ideas: limits, derivatives, and integrals and the Fundamental Theorem of Calculus. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the AP Calculus AB Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

AP Calculus BC | TEA # A3100102 | Course # 0393

Grade Placement: 12
Credit: 1
College Board Recommended Prerequisites: Before studying calculus, all students should complete four years of secondary mathematics designed for college-bound students: courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions.
AP Calculus BC is an extension of AP Calculus AB and is designed to develop mathematical knowledge conceptually, by guiding students to connect topics and representations throughout each course and apply strategies and techniques to accurately solve diverse types of problems. The curriculum for AP Calculus BC expands a student's understanding of the concepts in calculus including functions, graphs, limits, derivatives, integrals and their applications, and polynomial approximations and series. Additional topics to be studied include parametric, polar and vector functions, and polynomial approximations and series. Students are expected to have a complete understanding of all functions and their graphs from prior courses, as well as a complete understanding of algebraic, geometric and trigonometric skills. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the AP Calculus BC Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

AP Statistics | TEA # A3100200 | Course # 0922

Grade Placement: 11, 12
Credit: 1
College Board Recommended Prerequisites: Students must have taken second-year algebra before enrolling in AP Statistics.
AP Statistics is a course that introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from the data they have viewed or collected. Students will explore data by describing patterns and departures from patterns, sample and experiment through a variety of planned studies, anticipate patterns based on random phenomena using probability and simulation, and use statistical inference to provide estimations for the development of parameters and hypotheses. Students will be responsible for projects, labs, cooperative group problem-solving, writing, and individual coursework to prepare them for the AP Statistics exam through the College Board. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments and college level coursework. This course will follow the AP Statistics Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

Statistics Dual Credit TEA # 03102530 Course # 0923D

Grade Placement: 10 - 12
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II; Met South Texas College acceptance criteria
STC MATH 1442 Elementary Statistical Methods - This course is a presentation and interpretation of data, probability, sampling, correlation and regression, analysis of variance, and use of statistical software.

Calculus I Dual Credit TEA # IHE11100 Course # 0395D

Grade Placement: 11, 12
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II; Met South Texas College acceptance criteria; a grade of " C" or better in MATH 1316 or MATH 2412
STC MATH 2413 Calculus I - This course covers functions, limits, continuity, differentiation, anti-derivatives, and the definite integral and its applications.

Calculus II Dual Credit TEA # IHE11100 Course # 0393D

Grade Placement: 11, 12
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II; Met South Texas College acceptance criteria; a grade of " C" or better in MATH 2413
STC MATH 2414 Calculus II -This course covers derivatives and integrals of transcendental functions, integration methods and applications, infinite sequences and series.

College Preparatory Math (HB5) TEA# CP111200 Course # 0373

Grade Placement: 12
Credit: 1
Prerequisite: Meet criteria
As part of the Texas Success Initiative (TSIA), Texas law requires students entering college to have readiness in reading and mathematics. Various assessments determine if a student needs reinforcement of specific skills. College Preparatory Math through House Bill 5 includes a study of relations, functions, inequalities, algebraic expressions, and equations (linear, polynomial, radical, rational), with special emphasis on linear and quadratic expressions and equations. This course addresses a variety of mathematical topics needed to prepare student success in college-level mathematics.
Note: This course will satisfy the fourth mathematics credit requirement for graduation. Although College Preparatory Mathematics is a state approved mathematics elective credit, most colleges and universities will not accept it for admission purposes and may request students take the TSIA.

Digital Electronics Honors TEA # 13037600 Course # 0913

Grade Placement: 10-12
Credit: 1
From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry including logic gates, integrated circuits, and programmable logic devices.
Note: This course can satisfy a math credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate math course sequence and can apply this course to their math graduation requirements.

Accounting II Honors TEA # 13016700 Course # 0535

Grade Placement: 11–12
Credit: 1
Prerequisites: Accounting I

In Accounting II, students will continue the investigation of the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in various managerial, financial, and operational accounting activities. Students will formulate, interpret, and communicate financial information for use in management decision making. Students will use equations, graphical representations, accounting tools, spreadsheet software, and accounting systems in real-world situations to maintain, monitor, control, and plan the use of financial resources.

Note: This course can satisfy a math credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate mathematics course sequence and can apply this course to their math graduation requirements.

Science Courses

Integrated Physics and Chemistry
Integrated Physics and Chemistry Honors
Biology
Biology Honors
AP Biology
Biology for Science Majors I Dual Credit
Biology for Science Majors II Dual Credit
Biology for Non – Science Majors I Dual Credit
Biology for Non – Science Majors II Dual Credit
Chemistry
Chemistry Honors
AP Chemistry
Physics
Physics Honors
AP Physics 1
AP Physics 2
AP Environmental Science
Anatomy & Physiology (CTE Program Course)
Anatomy & Physiology Honors (CTE Program Course)
Scientific Research & Design (CTE Program Course)
Scientific Research & Design Honors (CTE Program Course)
Medical Microbiology (CTE Program Course)
Medical Microbiology Honors (CTE Program Course)
Microbiology for Science Majors Dual Credit
Forensic Science (CTE Program Course)
Forensic Science Honors (CTE Program Course)
Advanced Animal Science Honors (CTE Program Course)
Engineering Science Honors (CTE Program Course)

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Integrated Physics and Chemistry TEA # 03060201 Course # 0402

Grade Placement: 9 - 10
Credit: 1
In Integrated Physics and Chemistry, 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.

Integrated Physics and Chemistry Honors TEA # 03060201 Course # 0400

Grade Placement: 9
Credit: 1
Integrated Physics and Chemistry Honors 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. Integrated Physics and Chemistry Honors includes a more in-depth study of IPC curriculum with additional emphasis on critical thinking and high-level problem-solving skills. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework.

Biology TEA # 03010200 Course # 0410

Grade Placement: 9 - 11
Credit: 1
In Biology, 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. This course requires successful performance on the STAAR Biology End-of-Course assessment for graduation.

Biology Honors TEA # 03010200 Course # 0408

Grade Placement: 9
Credit: 1
Biology Honors assists students in conducting laboratory and field investigations, using scientific methods during investigations, and making informed decisions using critical thinking and scientific problem solving. Students in Biology Honors 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 helps students focus deeply on four core areas: ecological systems, evolution, cellular systems and genetics through dialogue, investigations, and problem solving. The intentional rigor implemented in Biology Honors establishes the foundation necessary for all upper level sciences, advanced placement (AP) and college level science coursework. This course requires successful performance on the STAAR Biology End-of-Course assessment for graduation.

AP Biology TEA # A3010200 Course # 0418

Grade Placement: 9-12
Credit: 1
Prerequisite: College Board recommendation is successful completion of high school Biology and Chemistry.
AP Biology is a course designed using the Biology curriculum framework as its foundation and develops advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. This course is structured into three big ideas; the process of evolution, biological systems and molecular building blocks for maintaining homeostasis, and living systems genetic information. This course will follow the AP Biology Advanced Placement requirements outlined in the AP College Board Course and Exam Description. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework.

Biology for Science Majors I Dual Credit TEA # 13037200 Course # 0417D

Grade Placement: 11-12
Credit: 1
Prerequisite: High school Biology and Chemistry; Meet South Texas College acceptance criteria.
STC BIOL 1406 Biology for Science Majors I - This is an in-depth study of the fundamental principles of living organisms including physical and chemical properties of life, cellular organization and function. Concepts of metabolic pathways, cellular respiration, photosynthesis, mitosis, meiosis, and molecular biology of the gene, genetics biotechnology, evolutionary adaptation and the scientific method are included.

Biology for Science Majors II Dual Credit TEA # 13037210 Course # 2417D

Grade Placement: 11-12
Credit: 1
Prerequisite: High school Biology and Chemistry; Meet South Texas College acceptance criteria; a grade of a " C" or better in BIOL 1406.
STC BIOL 1407 Biology for Science Majors II - This is a continuation of Biology 1406. It is an in-depth study of the fundamental principles of living organisms including classification and evolution. Topics include biodiversity of viruses, bacteria, archaea, protists, fungi, plants, and animals, comparison of the organization, function and reproduction, ecology of behavior, populations, communities, and the biosphere.

Biology for Non - Science Majors I Dual Credit TEA # 13037200 Course # 0417DN

Grade Placement: 11-12
Credit: 1
Prerequisite: High school Biology and Chemistry; Meet South Texas College acceptance criteria.
STC BIOL 1408 Biology for Non - Science Majors I - This is an overview of the fundamental principles of living organisms including physical and chemical properties of life, cellular organization and function. Concepts of metabolic pathways, cellular respiration, photosynthesis, mitosis, meiosis, and molecular biology of the gene, genetics, biotechnology, evolutionary adaptation and the scientific method are included.

Biology for Non - Science Majors II Dual Credit TEA # 13037210 Course # 2417DN

Grade Placement: 11-12
Credit: 1
Prerequisite: High school Biology and Chemistry; Meet South Texas College acceptance criteria; a grade of a " C" or better in BIOL 1408.
STC BIOL 1409 Biology for Non - Science Majors II - This is a continuation of Biology 1408. It is an overview of the fundamental principles of living organisms including classification and evolution. Topics include biodiversity of viruses, bacteria, archaea, protists, fungi, plants, and animals, comparison of their organization, function and reproduction with humans, and ecology of behavior, populations, communities, and the biosphere, including effects of human activities.

Chemistry | TEA # 03040000 | Course # 0422

Grade Placement: 10
Credit: 1
Prerequisite: One unit of high school science; Algebra I
In Chemistry, 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 | TEA # 03040000 | Course # 0420

Grade Placement: 10
Credit: 1
Prerequisite: Biology; Algebra I
Chemistry Honors extends the Chemistry curriculum to target specific content in advanced placement (AP) courses. In Pre-AP Chemistry, 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 establishes the foundation necessary for all upper level sciences, advanced placement (AP) course work, and college level science coursework.

AP Chemistry | TEA # A3040000 | Course # 0428

Grade Placement: 11-12
Credit: 1
Prerequisite: College Board recommendation is successful completion of high school Chemistry and Algebra II.
AP Chemistry is designed to be taken only after the successful completion of high school Chemistry. Students who take AP Chemistry will take a course with the same curriculum framework as its foundation, but will also develop advanced inquiry, and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. This course is structured into three big ideas; chemical elements and the atomic theory of matter, chemical and physical properties and transformations of matter, and chemical changes in matter. This course will follow the AP Chemistry Advanced Placement requirements outlined in the AP College Board Course and Exam Description. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework.

Physics | TEA # 03050000 | Course # 0432

Grade Placement: 9-12
Credit: 1
Prerequisite: Algebra I
In Physics, 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: laws of motion; changes within physical systems and conservation of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. Students who successfully complete Physics will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, work collaboratively with colleagues, and develop critical thinking skills.

Physics Honors | TEA # 03050000 | Course # 0430

Grade Placement: 11
Credit: 1
Prerequisite: Biology; Chemistry; Algebra I
In Physics Honors, 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: laws of motion; changes within physical systems and conservation of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. Students who successfully complete Physics Honors will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, and gain further preparation for AP level Physics. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework.

AP Physics 1 | TEA # A3050003 | Course # 0436

Grade Placement: 11, 12
Credit: 1
Prerequisite: College Board recommends that students should have completed Geometry and be taking Algebra II or an equivalent course. AP Physics 1 includes basic use of trigonometric functions.
AP Physics is designed to be taken only after successful completion of high school Physics. AP Physics establishes important practices that enable students to provide evidence and use the evidence developed to refine testable explanations and prediction of natural phenomena. Because content, inquiry, and reasoning are equally important in AP Physics, there are six big ideas students will learn in preparation for the AP Physics assessment: mass in objects and systems, fields existing in space, interactions between an object with another, interaction between systems, the result of interactions, and energy and momentum transfer through waves from one location to another. This course will follow the AP Physics Advanced Placement requirements outlined in the AP College Board Course and Exam Description. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework.

AP Physics 2 | TEA # A3050004 | Course # 0437

Grade Placement: 11, 12
Credit: 1
Prerequisite: College Board recommends that students should have completed Geometry and be taking Algebra II or an equivalent course. AP Physics 1 includes basic use of trigonometric functions.
AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics

AP Environmental Science | TEA # A3020000 | Course # 2449

Grade Placement: 11, 12
Credit: 1
Prerequisite: College Board recommends that students should have completed two years of high school laboratory science-one year of life science and one year of physical science. Students should have also taken one year of Algebra.
AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. AP Environmental science connects a wide variety of sciences into one course; these include geology, biology, environmental studies, environmental science, chemistry, and geography. The AP Environmental Science course has been developed to enable students to undertake, as first-year college students, a more advanced study of topics in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these

problems, and to examine alternative solutions for resolving or preventing them. This course will follow the AP Environmental Science Advanced Placement requirements outlined in the AP College Board Course and Exam Description. The intentional rigor implemented in this course is to prepare students for college, dual credit, and advanced placement (AP) assessments.

Anatomy and Physiology TEA # 13020600 Course # 0439

Grade Placement: 10-12
Credit: 1
Prerequisite: Biology and a second science credit
Recommended Prerequisite: A course from the Health and Science Career Cluster.
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.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Anatomy and Physiology Honors TEA # 13020600 Course # 0438

Grade Placement: 10-12
Credit: 1
Prerequisite: Biology and a second science credit
Recommended Prerequisite: A course from the Health and Science Career Cluster.
Anatomy and Physiology is a course 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. This course is similar to Anatomy and Physiology; however, it incorporates higher-order thinking skills through assessment and synthesis of the anatomical knowledge combined with exposure to clinical analysis and lab work. 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.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Scientific Research & Design TEA # 13037200 Course # 0446

Grade Placement: 11–12
Credit: 1
Prerequisite: Biology, Chemistry, Integrated Physics, and Chemistry (IPC), or Physics
Scientific Research and Design has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. These components are integrated with the career and technical education emphasis of helping students gain entry-level employment in high-skill, high-wage jobs and/or continue their education. Students must meet the 40% laboratory and fieldwork requirement.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate course sequence and can apply this course to their science graduation requirements.

Scientific Research & Design Honors TEA # 13037200 Course # 0441

Grade Placement: 11–12
Credit: 1
Prerequisite: Biology, Chemistry, Integrated Physics, and Chemistry (IPC), or Physics
Scientific Research and Design has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. These components are integrated with the career and technical education emphasis of helping students gain entry-level employment in high-skill, high-wage jobs and/or continue their education. Students must meet the 40% laboratory and fieldwork requirement. This course is similar to Scientific Research and Design; however, it incorporates higher-order thinking

skills through assessment and synthesis of the presented knowledge combined with exposure to clinical analysis and lab work.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate course sequence and can apply this course to their science graduation requirements.

Medical Microbiology TEA # 13020700 Course # 0907

Grade Placement: 10-12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisites: A course from the Health Science Career Cluster.
The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Medical Microbiology Honors TEA # 13020700 Course # 0909

Grade Placement: 10-12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisites: A course from the Health Science Career Cluster.
The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. This course is similar to Medical Microbiology; however, it incorporates higher-order thinking skills through assessment and synthesis of the presented knowledge combined with exposure to clinical analysis and lab work. Students must meet the 40% laboratory and fieldwork requirement.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Microbiology for Science Majors TEA # 13020700 Course # 0907D

Grade Placement: 11-12
Credit: 1
Prerequisite: High school Biology and Chemistry; Meet South Texas College acceptance criteria; a grade of a "C" or better in BIOL 1406, BIOL 1407 and CHEM 1411.
STC BIOL 2421 Microbiology for Science Majors - This is a study of principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts and the environment. Laboratory activities will reinforce principles of microbiology as well as the microbial interactions including all of the principles and microbial interactions covered in the lecture sessions. Note: This course may substitute the fourth science credit requirement for graduation. In order to register for this course, students must meet with their academic counselor for the appropriate science course sequence.

Forensic Science TEA # 13029500 Course # 0906

Grade Placement: 11–12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections & Safety Career Cluster course.
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. Scientific

methods of investigation can be experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Forensic Science Honors TEA # 13029500 Course # 0910

Grade Placement: 11–12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections & Safety Career Cluster course.
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 with the use of higher order thinking skills and strategies. 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. Scientific methods of investigation can be experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked. Students are expected to work collaboratively as well as individually to reach specific course requirements.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Advanced Animal Science Honors TEA # 13000700 Course # 0525

Grade Placement: 11–12
Credit: 1
Prerequisites: Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production.
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.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Engineering Science Honors TEA # 13037500 Course # 0912

Grade Placement: 10-12
Credit: 1
Prerequisite: Algebra I and Biology; and Chemistry, IPC, or Physics
Recommended Prerequisite: Geometry
Engineering Science Honors is an engineering course designed to expose students to some of the major concepts and technologies that they will encounter in a postsecondary program of study in any engineering domain. Students will have an opportunity to investigate engineering and high-tech careers. In Engineering Science Honors, students will employ science, technology, engineering, and mathematical concepts in the solution of real-world challenge situations. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Social Studies Courses

World Geography
World Geography Honors
World History
World History Honors
AP World History
AP Human Geography
United States History
AP United States History
United States History Dual Credit
United States Government
AP United States Government and Politics
Federal Government Dual Credit
Texas Government Dual Credit
Economics
Economics Honors
Personal Financial Literacy & Economics
AP Macroeconomics
Macroeconomics Dual Credit
Special Topics in Social Studies I
Special Topics in Social Studies II
Personal Financial Literacy
General Psychology Dual Credit
Sociology Dual Credit

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World Geography TEA # 03320100 Course # 0302

Grade Placement: 9
Credit: 1
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. Students will study the 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.

World Geography Honors TEA # 03320100 Course # 0300

Grade Placement: 9
Credit: 1
In World Geography Honors, students examine people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. Students are expected to develop and practice the skills of analyzing evidence, disciplinary reasoning, and developing arguments. Students will describe the influence of geography on events of the past and present with emphasis on contemporary issues. Students will analyze how location affects economic activities in different economic systems. Students compare how components of culture shape the characteristics of regions and analyze the impact of technology and human modifications on the physical environment. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework.

World History TEA # 03340400 Course # 0312

Grade Placement: 10
Credit: 1
World History Studies is a survey of the history of humankind through various eras, events, and people. The major emphasis is on the study of significant people 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 history and impact of major religious and philosophical traditions.

World History Honors TEA# 03340400 Course # 0310

Grade Placement: 10
Credit: 1
World History Studies Honors is a survey of the history of humankind. The scope of this course focuses on essential concepts and skills that can be applied to various eras, events, and people. 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 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. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP), and college level coursework.

AP World History | TEA # A3370100 | Course # 0311

Grade Placement: 10
Credit: 1
College Board Recommended Prerequisite: There are no prerequisites for the courses, but students should be able to read a college-level textbook and write grammatically correct, complete sentences.
AP World History is designed to be the equivalent of a two-semester introductory college or university world history course. In AP World History students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the AP World History Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

AP Human Geography | TEA # A3360100 | Course # 0299

Grade Placement: 10
Credit: 1
College Board Recommended Prerequisite: Students need to be able to read college-level texts and apply the conventions of Standard Written English in their writing. However, a background in world history, world regional geography, physical geography, comparative world religions, and economics will give students a solid foundation for building conceptual understanding.
AP Human Geography course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the AP Human Geography Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

United States History | TEA # 03340100 | Course # 0322

Grade Placement: 11
Credit: 1
In United States History Studies Since 1877, which is the second part of a two-year study that begins in Grade 8, students study the history of the United States from 1877 to the present. 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 will evaluate the dynamic relationship of the three branches of the federal government, analyze efforts to expand the democratic process, and describe the relationship between the arts and popular culture and the times during which they were created. 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. This course requires successful performance on the STAAR United States History End-of-Course assessment for graduation.

AP United States History | TEA# A3340100 | Course # 0321

Grade Placement: 11
Credit: 1
College Board Recommended Prerequisite: Students should be able to read a college-level textbook and write grammatically correct, complete sentences.

AP United States History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use skills, practices, and methods for analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. AP U.S. History provides seven themes that students explore to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society. The intentional rigor implemented in this course is to prepare students dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the AP United States History Advanced Placement requirements outlined in the AP College Board Course and Exam Description. This course requires successful performance on the STAAR United States History End-of-Course assessment for graduation.

United States History Dual Credit TEA # 03340100 Course # 0320D

Grade Placement: 11
Credit: 1
Prerequisite: High school World Geography or World History; Meet South Texas College acceptance criteria.
STC HIST 1301 United States History I - This course is 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.
STC HIST 1302 United States History II - This course is a survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. This course requires successful performance on the STAAR United States History End-of-Course examination for graduation.

United States Government TEA # 03330100 Course # 0332

Grade Placement: 10-12
Credit: 0.5
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. Students learn major political ideas and forms of government in history. 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 examine the relationship between governmental policies and the culture of the United States.

United States Government Honors TEA# 03330100 Course # 0326

Grade Placement: 10-12
Credit: 0.5
In United States Government Honors, 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. 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 examine the relationship between governmental policies and the culture of the United States and analyze the impact of individuals,

political parties, interest groups, and the American political system. Students identify examples of government policies that encourage scientific research and use critical-thinking skills to create a product on a contemporary government issue.

AP United States Government and Politics TEA # A3330100 Course # 0324

Grade Placement: 11
Credit: 0.5
College Board Recommended Prerequisite: Students should be able to read and comprehend a college-level textbook and write grammatically correct, complete sentences.
AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the United States Government and Politics Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

Federal Government Dual Credit TEA# 03330100 Course # 0330D

Grade Placement: 11
Credit: 0.5
Prerequisite: High school World Geography or World History; Meet South Texas College acceptance criteria.
STC GOVT 2305 Federal Government- This course covers the origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties, and civil rights.

Texas Government Dual Credit TEA# 03380002 Course # 2330D

Grade Placement: 11
Credit: 0.5
Prerequisite: High school World Geography or World History; Meet South Texas College acceptance criteria.
STC GOVT 2306 Texas Government- This course covers the origin and development of the Texas Constitution, structure and powers of state and local government, federalism and intergovernmental relations, political participation, the election process, public policy, and the political culture of Texas.

Economics TEA # 03310300 Course # 0333

Grade Placement: 12
Credit: 0.5
Economics with Emphasis on the Free Enterprise System and Its Benefits is the culmination of the economic content and concepts studied from Kindergarten through required secondary courses. 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 around the world. Students will investigate the concepts of specialization and international trade, economic growth, key economic measurements, and monetary and fiscal policy. Types of business ownership and market structures are discussed. The course also incorporates instruction in personal financial literacy.

Economics Honors TEA # 03310300 Course # 0327

Grade Placement: 12
Credit: 0.5

Economics with Emphasis on the Free Enterprise System and Its Benefits is the culmination of the economic content and concepts studied from Kindergarten through required secondary courses. 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 around the world. 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 businesses in a free enterprise system. Types of business ownership and market structures are discussed. The course also incorporates instruction in personal financial literacy. Students apply critical-thinking skills using economic concepts to evaluate the costs and benefits of economic issues.

Personal Financial Literacy & Economics TEA #03380083 Course # 0334

Grade Placement: 12
Credit: 0.5
The Personal Financial Literacy and Economics Course emphasizes the economic way of thinking, which serves as a framework for the personal financial decision-making opportunities introduced in the course. Students will demonstrate the ability to anticipate and address financial challenges as these challenges occur over their lifetime. In addition, students are introduced to common economic and personal financial planning terms and concepts. As a result of learning objective concepts and integrating subjective information, students gain the ability to lead productive and financially self-sufficient lives.

**Students may successfully complete either this new course or the Economics with Emphasis on the Free Enterprise System and Its Benefits course to satisfy the half-credit economics requirement for high school graduation.*

AP Macroeconomics TEA # A3310200 Course # 0325

Grade Placement: 11, 12
Credit: 1
College Board Recommended Prerequisite: Students should be able to read a college-level textbook and should possess basic mathematics and graphing skills.
The AP Macroeconomics course provides students with a thorough understanding of the principles of economics and how economists use those principles to examine aggregate economic behavior.
Students learn how the measures of economic performance, such as gross domestic product (GDP), inflation, and unemployment are constructed and how to apply them to evaluate the macroeconomic conditions of an economy. The course recognizes the global nature of economics and provides ample opportunities to examine the impact of international trade and finance on national economies.
Various economic schools of thought are introduced as students consider solutions to economic problems. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the AP Macroeconomics Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

Macroeconomics Dual Credit TEA # 03310300 Course # 0331D

Grade Placement: 11, 12
Credit: 1
Prerequisite: High school World Geography or World History; Meet South Texas College acceptance criteria.
STC ECON 2301 Principles of Economics I Macro - This course is an analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy

Personal Financial Literacy TEA # 03380082 Course # 1927

Grade Placement: 10-12
Credit: 0.5

Personal Financial Literacy will develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lifestyles and understand personal financial responsibility. Personal Financial Literacy is designed to be a course that will teach students skills to analyze decisions involving earning and spending, saving and investing, credit and borrowing, insuring and protecting, and college and postsecondary education and training. Students evaluate the necessity of the purchase, the quality or value of the purchase or investment compared to other alternatives, and the total cost of acquisition, particularly in the context of financing options.

General Psychology Dual Credit TEA # 03350100 Course # 0399D

Grade Placement: 10-12
Credit: 0.5
Prerequisite: Meet South Texas College acceptance criteria.english
STC PSYC 2301 General Psychology - This course is a survey of the major topics in psychology. It introduces the study of behavior and the factors that determine and affect behavior.

Sociology Dual Credit TEA # 03370100 Course # 0398D

Grade Placement: 10-12
Credit: 0.5
Prerequisite: Meet South Texas College acceptance criteria.
STC SOCI Introductory Sociology - This course is 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.

Languages Other Than English

Spanish I – English speakers
Spanish I – Spanish speakers
Spanish II – English speakers
Spanish II – Spanish speakers
Spanish III – English speakers
Spanish III – Spanish speakers
AP Spanish Language and Culture
AP Spanish Literature and Culture
Spanish for Native/Heritage Speakers Dual Credit
Spanish for Native/Heritage Speakers II Dual Credit
French I
French II
French III
French III Honors
AP French Language and Culture

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Spanish I – E (English speakers) TEA # 03440100 Course # 0348

Grade Placement: 9-12
Credit: 1
This course is designed to develop basic reading and communication skills. It introduces students to basic vocabulary, indicative tenses, and cultural/historical information from the Spanish speaking countries. This course is open to non-Spanish speakers only.

Spanish I – S (Spanish speakers) TEA # 03440110 Course # 0340

Grade Placement: 9-12
Credit: 1
This course is designed to enable students to attain a measurable degree of communicative competency and proficiency in each of the language skills. It reinforces simple vocabulary, indicative tenses, and basic communication skills. This course is open to students who have some understanding of the Spanish language.

Spanish II – E (English speakers) TEA # 03440200 Course # 0350

Grade Placement: 9-12
Credit: 1
Prerequisite: Spanish I-E
This course is a continuation of Spanish I-E with a review of the indicative tenses, and a variety of vocabulary that will be used to attain a measurable degree of communicative competency and proficiency in each of the language skills. This course is open to non-Spanish speakers only.

Spanish II – S (Spanish speakers) TEA # 03440220 Course # 0342

Grade Placement: 9-12
Credit: 1
Prerequisite: Spanish I-S
Spanish II-S is a continuation of Spanish I-S with an in-depth study of listening, speaking, reading and writing of the Spanish language. Students are required to have the ability to express themselves orally and through written compositions. Materials of an awareness of history and culture are provided. Students are able to practice conversational Spanish through oral activities such as dialogues, role-plays, poetry recitation and short story writing as well as class presentations. This course is designed to make the transition to Spanish III and/or Spanish AP easier.

Spanish III – E (English speakers) TEA # 03440300 Course # 0352

Grade Placement: 10-12
Credit: 1
Prerequisite: Spanish I-E & Spanish II-E
Spanish III-E refines listening, speaking, reading, writing and grammar skills. Emphasis will be provided on the culture and history of Spanish-speaking countries as well as traditions and celebrations using a wide variety of media sources available such as newspapers, short-stories, videos, music and/or magazines. Students must be able to express themselves well in both written and oral Spanish. Students must have completed or tested out of both Spanish I-E and Spanish II-E.

Spanish III – S (Spanish speakers) TEA # 03440330 Course # 0344

Grade Placement: 10-12
Credit: 1
Prerequisite: Spanish I-S & Spanish II-S
Spanish III-S refines listening, speaking, reading and writing skills. Grammar and literature are studied in detail. Emphasis will be provided on the culture and history of the people of Spanish speaking countries. Students must be able to express themselves well both in written and oral Spanish. A student must have completed or tested out of both Spanish I-S and Spanish II-S.

AP Spanish Language and Culture TEA # A3440100 Course # 0346

Grade Placement: 9 -12
Credit: 1

College Board Recommended Prerequisite: Students who enter this course should have three to five years of language instruction at the high school level.
The AP Spanish Language and Culture course takes a holistic approach to language proficiency and focuses on comprehension, vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course promotes fluency and accuracy, engages students in an exploration of culture in both contemporary and historical contexts, and develops students' awareness of books, practices, perspectives and social interactions within a culture. The intentional rigor implemented in this course is to prepare students for dual credit, advanced placement (AP) assessments, and college level coursework. This course will follow the AP Spanish Language and Culture Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

AP Spanish Literature and Culture TEA # A3440200 Course # 0347

Grade Placement: 9 -12
Credit: 1
College Board Recommended Prerequisite: Students who enter this course should have three to five years of language instruction at the high school level.
The AP Spanish Literature and Culture course is designed to provide students with a learning experience equivalent to that of an introductory college course in literature written in Spanish. The course introduces students to the formal study of a representative body of texts from Peninsular Spanish, Latin American, and U.S. Hispanic literature. The course provides opportunities for students to demonstrate their proficiency in Spanish across the three modes of communication: interpersonal, interpretive, and presentational; and the five goal areas: communication, cultures connections, comparisons, and communities. A key objective of the course is to encourage students not only to understand and retell the content of the texts they read but also to relate that content to literary, historical, sociocultural, and geopolitical contexts in Spanish. This course prepares students for the College Board AP Spanish Literature and Culture examination which consists of free- response questions on listening comprehension, reading comprehension and literary analysis, as well as free-response essays on required authors, and poetry analysis. This course will follow the AP Spanish Literature and Culture Advanced Placement requirements as outlined in the AP College Board Course and Exam Description.

Spanish for Native/Heritage Speakers I Dual Credit TEA # 03440110 Course # 0340D

Grade Placement: 11-12
Credit: 1
Prerequisite: Meet South Texas College acceptance criteria
STC SPAN 2313 Spanish for Native/Heritage Speakers I -This course builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

Spanish for Native/Heritage Speakers II Dual Credit TEA # 03440220 Course # 0342D

Grade Placement: 11-12
Credit: 1
Prerequisite: Meet South Texas College acceptance criteria; a grade of a " C" or better in SPAN 2313.
STC SPAN 2315 Spanish for Native/Heritage Speakers II - This course is a review and application of skills in reading and writing. Emphasizes on vocabulary, acquisition, reading, composition, and culture. Designed for individuals with oral proficiency in Spanish, these courses are considered equivalent to SPAN 2311 and SPAN 2312.

French I TEA # 03410100 Course # 0354

Grade Placement: 9-12
Credit: 1
Prerequisite: Official promotion to or placement in high school.
This is a full-year course designed to develop the ability to understand, read, speak, and write the French language. Time will be spent on conversation, reading, and writing, and learning about culture structure and grammar both in their native language as in French.

French II TEA # 03410200 Course # 0356

Grade Placement: 9-12
Credit: 1
Prerequisite: French I

This is a continuation of French I. This course emphasizes more conversational French in class. Reading, writing, listening and comprehension of the French language is stressed. Students develop an understanding of morphology and syntax. Students must have successfully completed French I prior to taking French II.

French III TEA # 03410300 Course # 0358

Grade Placement: 10-12
Credit: 1
Prerequisite: French II
The emphasis of French III is the strengthening of the basic language skills with a concentration on communication. The student will read and discuss a variety of authentic selections in French. In French III, students will read and discuss more complex literary selections. Independent use of the language will be fostered through writing and conversational opportunities. Students must have successfully completed French I and French II prior to taking French III.

French III Honors TEA # 03410300 Course # 0357

Grade Placement: 10-12
Credit: 1
Prerequisite: French II
The emphasis of French level three is the strengthening of the basic language skills with a concentration of communication both verbal and written. The student will read and discuss a variety of authentic selections in French. The level-three honors French student will read and discuss more complex literary selections. Independent use of the language will be fostered through writing and conversational opportunities. Students must have successfully completed French I and French II prior to taking French III Honors.

AP French Language and Culture TEA # A3410100 Course # 0359

Grade Placement: 11-12
Credits: 1
College Board Recommended Prerequisite: Students who enter this course should have three to five years of language instruction at the high school level.
The AP French Language and Culture course takes a holistic approach to language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. The AP French Language and Culture course strives to promote both fluency and accuracy in language and engages students in an exploration of culture in both contemporary and historical contexts. This course prepares students for the College Board AP French Language and Culture examination, which consists of multiple-choice questions in reading and listening and free- response questions in writing and speaking. The AP French Language and Culture examination evaluates both understanding and the ability to respond to written and spoken French within six major cultural themes.

Fine Art Courses

Art I
Design I
Design II
Drawing I
Drawing II
Painting I
Painting II
Sculpture I
Sculpture II
Art Appreciation Dual Credit
Theater Arts I – IV
Theater Production I-IV
Drama Appreciation Dual Credit
Applied Music I – II
Choir I – IV
Dance I – IV
Diamonds/ Diamond Belles I – IV
Folklorico I – IV
Mariachi I – IV
Floral Design

It is Sharyland ISD's intent to offer all courses in this catalog. Some courses may not be offered if sufficient student interest or enrollment is not evident. Instructor availability will also be a factor in course offerings.

Art I TEA # 03500100 Course # 0200

Grade Placement: 9-12
Credit: 1
In Art I, the student develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. The student uses what the student sees, knows, and has experienced as sources for examining, understanding, and creating original artwork.

Design I TEA # 03501210 Course # 0206

Grade Placement: 9-12
Credit: 1
The student develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. The student uses what the student sees, knows, and has experienced as sources for examining, understanding, and creating original artworks. The student is expected to express thoughts and ideas creatively while challenging the imagination, fostering reflective thinking, and developing disciplined effort and progressive problem-solving skills. The student will create original design using multiple solutions from direct observation, original sources, experiences, and imagination in order to expand personal themes that demonstrate artistic intent.

Design II TEA # 03501600 Course # 1206

Grade Placement: 10-12
Credit: 1
Prerequisite: The prerequisite for each art course listed is one credit of the same Level I course.
The student develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities and connect those to concepts from Design I. The student uses what the student sees, knows, and has experienced as sources for examining, understanding, and creating original artwork. The student is expected to express thoughts and ideas creatively while challenging the imagination, fostering reflective thinking, and developing disciplined effort and progressive problem-solving skills. The student will create original design using multiple solutions from direct observation, original sources, experiences, and imagination in order to expand personal themes that demonstrate artistic intent.

Drawing I TEA # 03500500 Course # 0202

Grade Placement: 9-12
Credit: 1
Drawing I incorporates observation and perception, creative expression, historical and cultural relevance, and critical evaluation and response. Students will provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students will learn different drawing styles and techniques by expanding on multiple solutions from direct observation, original sources, experiences, and imagination in order to expand personal themes that demonstrate artistic intent.

Drawing II TEA # 03501300 Course # 1202

Grade Placement: 10-12
Credit: 1
Prerequisite: The prerequisite for each art course listed is one credit of the same Level I course.
Drawing II, like Drawing I, incorporates observation and perception, creative expression, historical and cultural relevance, and critical evaluation and response. Students will provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students will continue to rely on personal observations and perceptions, to communicate

their thoughts and ideas with innovation and creativity. The student will create original artwork using multiple solutions from direct observation, original sources, experiences, and imagination in order to expand personal themes that demonstrate artistic intent.

Painting I — TEA # 03500600 — Course # 0203

Grade Placement: 9-12
Credit: 1,
In Painting I, the student is expected to evaluate and analyze artwork using a method of critique such as describing the artwork, analyzing the way it is organized, interpreting the artist's intention, and evaluating the success of the artwork. The student will also analyze original artwork, portfolios, and exhibitions to demonstrate innovation and provide examples of in-depth exploration of qualities such as aesthetics; formal, historical, and cultural contexts; intentions; and meanings. The student will become familiar with original artwork using multiple solutions from direct observation, original sources, experiences, and imagination in order to expand personal themes that demonstrate artistic intent.

Painting II — TEA # 03501400 — Course # 0201

Grade Placement: 10-12
Credit: 1
Prerequisite: The prerequisite for each art course listed is one credit of the same Level I course.
As an extension of Painting I, Painting II expects students to continue the analytical and evaluative process of artwork, by interpreting the artist's intention, and evaluating the success of the artwork. The student will also analyze original artwork, portfolios, and exhibitions to demonstrate innovation and provide examples of in-depth exploration of qualities such as aesthetics; formal, historical, and cultural contexts; intentions; and meanings. The student will create original artwork using multiple solutions from direct observation, original sources, experiences, and imagination in order to expand personal themes that demonstrate artistic intent.

Sculpture I — TEA # 03501000 — Course # 0205

Grade Placement: 9-12
Credit: 1
Sculpture I is a course that guides students toward the creation of original artwork using direct observation, original sources, experiences, and imagination to expand personal themes that demonstrate artistic intent. Students will implement and organize multiple solutions between natural and man-made environments for the purpose of sculpting styles and techniques. Different sculpting techniques will be introduced and incorporated throughout the course.

Sculpture II — TEA # 03501900 — Course # 1205

Grade Placement: 10-12
Credit: 1
Prerequisite: The prerequisite for each art course listed is one credit of the same Level I course.
Sculpture II will continue to reinforce techniques learned in Sculpture I, and will continue to expose students to different forms of sculpting, modeling, and assembly. Through this course, students are expected to challenge their imaginations, foster critical thinking, and build pieces as they progress throughout the course.

Art Appreciation Dual Credit — TEA # 03500110 — Course # 0207D

Grade Placement: 10-12
Credit: 1
Prerequisite: Meet South Texas College acceptance criteria.
STC ARTS 1301 Art Appreciation - This course is a general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural and historical contexts

Theater Arts I - IV — TEA # 03250100 (I), 03250200 (II), 03250300 (III), 03250400(IV) Course # 0240 (I), 0241 (II), 0242 (III), 0243 (IV)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Teacher Approval

Theater Arts I-IV involves creative expression, using elements of drama and conventions of theater. In Theater Arts courses, students communicate in a dramatic form, engage in artistic thinking, build positive self-concepts, relate interpersonally and integrate knowledge with other content areas in a relevant manner. Students increase their understanding of heritage and traditions in theater and the diversity of world cultures as expressed in theater, engage in inquiry and dialogue, accept constructive criticism, revise personal views to promote creative and critical thinking, and develop the ability to appreciate and evaluate live theater. Through diverse forms of storytelling and production, students will exercise and develop creativity, intellectual curiosity, critical thinking, problem solving, and collaborative skills. Participation and evaluation in a variety of theatrical experiences will afford students opportunities to develop an understanding of self and their role in the world.

Theater Production I - IV

TEA # 03250700 (I), 03250800 (II), 03250900 (III), 03251000(IV)
Course # 0210 (I), 0212 (II), 0214 (III), 0216/2216 (IV)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Teacher Approval
Theater Production I-IV involves students in the conventions of theater, communicating in a dramatic form, engaging in artistic thinking, building positive self-concepts, relating interpersonally and integrating knowledge with other content areas in a relevant manner. Students will incorporate their understanding of heritage and traditions in theater and the diversity of world cultures as expressed in theater, engage in inquiry and dialogue, accept constructive criticism, revise personal views to promote creative and critical thinking, and develop the ability to appreciate and evaluate live theater. Through diverse forms of production, students will exercise and develop creativity, intellectual curiosity, critical thinking, problem solving, and collaborative skills. Participation and evaluation in a variety of theatrical experiences will afford students opportunities to develop an understanding of self and their role in the world.

Drama Appreciation Dual Credit

TEA # 03251000 Course # 0219D

Grade Placement: 10-12
Credit: 1
Prerequisite: Meet South Texas College acceptance criteria
STC DRAM 1310 Introduction to Theater - This course is a survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required.

Band

TEA # 03150100 (I), 03150200 (II), 03150300 (III), 03150400 (IV)
Course # 0220 (I), 0222 (II), 0224 (III), 0226 (IV)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
Band courses continue the process of music literacy; creative expression; historical and cultural relevance; and critical evaluation and response. The foundation of music literacy is fostered through reading, reproducing, and creating music. Through creative expression, students apply their music literacy and the critical-thinking skills of music to play, read, write, and/or move. By experiencing musical periods and styles, students will understand the relevance of music to history, culture, and the world, including the relationship of music to other academic disciplines and the vocational possibilities offered. Through critical listening, students analyze, evaluate, and respond to music, developing criteria for making critical judgments and informed choices. The student will describe and analyze music and musical sounds, develop organizational skills, engage in problem solving, and explore the properties and capabilities of various musical idioms.

Applied Music

TEA # 03152500 (I), 03152600(II) Course # 0227 (I), 0228 (II)

Grade Placement: 9-12 Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
Applied Music courses continue the implementation of music literacy; creative expression; historical and cultural relevance; and critical evaluation and response. The foundation of music literacy is fostered through reading, writing, reproducing, and creating music. By experiencing musical periods and styles, students will understand the relevance of music to history, culture, and the world, including the relationship of music to other academic disciplines and the vocational possibilities offered. The student will describe and analyze music and musical sounds, develop organizational skills, engage in problem solving, and explore the properties and capabilities of various musical idioms.

Choir — TEA # 03150900 (I), 03151000 (II), 03151100 (III), 03151200 (IV) Course # 0261 (I), 0263 (II), 0265 (III), 0267 (IV)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
Choir courses provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire through music. The foundation of Choir is fostered through reading, reproducing, and creating music. Through creative expression, students apply their music literacy and the critical-thinking skills of music to sing. By experiencing musical periods and styles, students will understand the relevance of music to history, culture, and the world, including the relationship of music to other academic disciplines and the vocational possibilities offered. Through critical listening, students analyze, evaluate, and respond to music, developing criteria for making critical judgments and informed choices. The student will describe and analyze music and musical sounds, develop organizational skills, engage in problem solving, and explore the properties and capabilities of various musical idioms.

Dance — TEA # PES00054 (I), 03830100 (II), 03830200 (III), 03830200 (IV) Course # 0280 (I), 0281 (II), 0282 (III), 0283 (V)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
Dance I-IV students develop movement principles and technical skills and explore choreographic and performance qualities. Students develop self-discipline and healthy bodies that move expressively, efficiently, and safely through space and time with a sensitive kinesthetic awareness. Students recognize dance as a vehicle for understanding historical and cultural relevance, increasing an awareness of heritage and traditions of their own and others, and enabling them to participate in a diverse society. Evaluating and analyzing dance allows students to strengthen decision-making skills, develop critical and creative thinking, and develop artistic and creative processes. Students continue to explore technology and its application to dance and movement, enabling them to make informed decisions about dance.

Diamonds/ Diamond Belles — TEA # PES00014 (I), 03830200 (II), 03830300 (III), 03830400 (IV) Course # 0284 (I), 0285 (II), 0286 (III), 0287 (IV)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
Diamonds I-IV follows the same criteria as Dance I-IV. Students are expected to develop movement principles and technical skills and explore choreographic and performance qualities. Students develop self-discipline and healthy bodies that move expressively, efficiently, and safely through space and time with a sensitive kinesthetic awareness.

Folklorico — TEA # 03830100 (I), 03830200 (II), 03830300 (III), 03830400 (IV) Course # 0254 (I), 0255 (II), 0256 (III), 0257 (IV)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
Folklorico I-IV follows the same criteria as Dance I-IV. Students are expected to develop movement principles and technical skills and explore choreographic and performance qualities. Students develop self-discipline and healthy bodies that move expressively, efficiently, and safely through space and time with a sensitive kinesthetic awareness. Students recognize dance as a vehicle for understanding historical and cultural relevance, increasing an awareness of heritage and traditions of their own and others, and enabling them to participate in a diverse society.

Mariachi — TEA # 03153800 (I), 03151800 (II), 03151900 (III), 03152000 (IV) Course # 0276 (I), 0277 (II), 0278 (III), 0279 (IV)

Grade Placement: 9-12
Credits: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval

Mariachi I-IV courses continue the process of music literacy; creative expression; historical and cultural relevance; and critical evaluation and response. The foundation of Mariachi is fostered through reading, reproducing, and creating music. Through creative expression, students apply their music literacy and the critical-thinking skills to play, read, or write music. By experiencing musical periods and styles, students will understand the relevance of music to history, culture, and the world. The student will describe and analyze music and musical sounds, develop organizational skills, engage in problem solving, and explore the properties and capabilities of various musical idioms.

Floral Design TEA # 13001800 Course # 0503

Grade Placement: 9–12
Credit: 1
Floral Design is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students will develop respect for the traditions and contributions of diverse cultures. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations. *Note: This course satisfies a fine arts credit requirement for students on the Foundation High School Program.*

Health & Physical Education Courses

Foundation of Personal Fitness
Team Sports
Girls Athletics
Boys Athletics
Adventure/Outdoor Education
Junior Research Officers Training Corps (JROTC)
Cheerleading

All students who are enrolled in a course that satisfies the curriculum requirements for physical education are assessed on their physical fitness using the FITNESSGRAM assessment. (TEC§38.101)

Health and physical education courses provide instruction in the principles and techniques of cardiopulmonary resuscitation. (TEC§28.0023)

Foundation of Personal Fitness TEA # PES00052 Course # 0562

Grade Placement: 9
Credit: 0.5
Foundations of Personal Fitness represents a new approach in physical education and the concept of personal fitness. The basic purpose of this course is to motivate students to strive for lifetime personal fitness with an emphasis on the health-related components of physical fitness. The knowledge and skills taught in this course include teaching students about the process of becoming fit as well as achieving some degree of fitness within the class. The concept of wellness, or striving to reach optimal levels of health, is the cornerstone of this course and is exemplified by one of the course objectives-students designing their own personal fitness program.

Team Sports TEA # PES00052 Course # 0564

Grade Placement: 10
Credit: 0.5
Prerequisite: Official promotion to or placement in high school; Approval by Team Coaching Staff
Students enrolled in Team Sports are expected to develop health-related fitness and an appreciation for teamwork and fair play. Like the other high school physical education courses, Team Sports is less concerned with the acquisition of physical fitness during the course than reinforcing the concept of incorporating physical activity into a lifestyle beyond high school.

Girls Athletics TEA # PES00052 Course # T564 – 2068
Boys Athletics

Grade Placement: 10
Credit: 1
Prerequisite: Official promotion to or placement in high school; Approval by Team Coaching Staff
Students enrolled in Team Sports are expected to develop health-related fitness and an appreciation for teamwork and fair play. Students will acquire the knowledge and skills for movement, social development, physical activity and health. Students enrolled in athletics are expected to exhibit a level of competency in one or more sports, consistently perform skills and strategies and follow rules in the selected sport, and correctly identify the critical elements for successful performance of a sport skill.

Adventure / Outdoor Education TEA # PES00053 Course # 0563

Grade Placement: 9
Credit: 1
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.

JROTC TEA # PES00004 (I), 03160100 (II), 03160300 (III), 03160400 (IV) Course # 1569 (I), 2569 (II), 3569 (III), 4569 (IV)

Grade Placement: 9-12 Credit: 1 per course
Prerequisite: Official promotion to or placement in high school; Teacher Approval
The U.S. Army Junior Reserve Officer Training Corps (JROTC) is a program offered to high schools that teaches students character education, student achievement, wellness, leadership, and diversity. It is a cooperative effort between the U.S. Army and the high schools to produce successful students and citizens, while fostering in each school a more constructive and disciplined learning environment.

Cheerleading TEA # PES00013 Course # 0680, 1680, 2680

Credit: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
Cheerleaders promote school spirit, participation, and the support of all athletic teams. Through the kinesthetic fundamentals of dance, stunting, and tumbling, cheerleaders are able to develop the skills necessary for self-discipline, and sportsmanship. Cheerleaders will also establish leadership capabilities, and cooperation with the team and the student

body. Students who are interested in cheerleading must try out for the team each year. Through tryouts, the selection process allows for only a certain number of students to participate.

College and Career Innovative Courses

Path-College/Career I TEA # N1290051 Course

Grade: 9-12
Credit: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
The Path-College/Career Prep courses advance intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. The Path secondary course series focuses on developing the habits and skills that are expected in college study and the workforce. High school Path students develop personal, interpersonal, and cognitive skills that are essential to productivity in both the collegiate and business worlds.

Path-College/Career II TEA # N1290052 Course

Grade: 9-12
Credit: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
The Path-College/Career Prep courses advance intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. The Path secondary course series focuses on developing the habits and skills that are expected in college study and the workforce. High school Path students develop personal, interpersonal, and cognitive skills that are essential to productivity in both the collegiate and business worlds.

Path-College/Career III TEA # N1290053 Course

Grade: 9-12
Credit: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
The Path-College/Career Prep courses advance intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. The Path secondary course series focuses on developing the habits and skills that are expected in college study and the workforce. High school Path students develop personal, interpersonal, and cognitive skills that are essential to productivity in both the collegiate and business worlds.

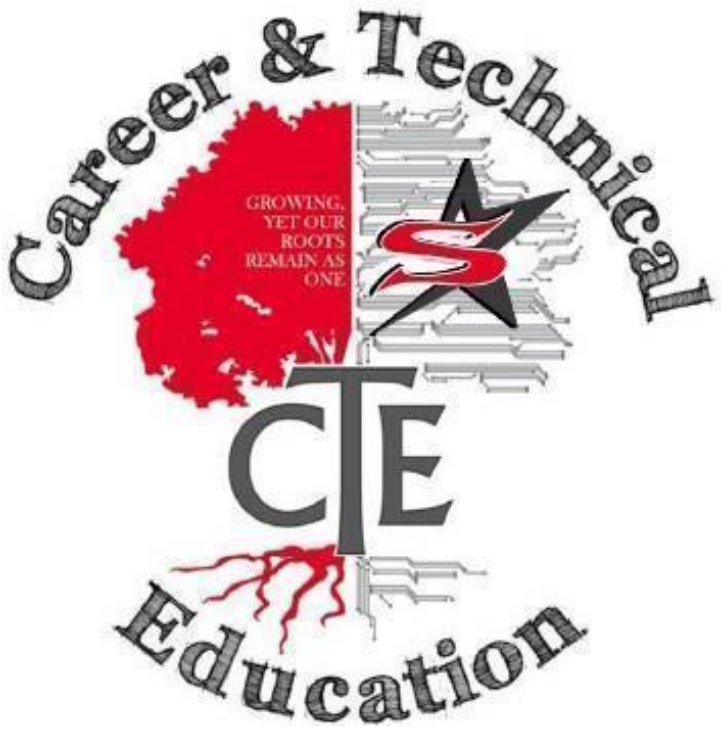
Path-College/Career IV TEA # N1290054 Course

Grade: 9-12
Credit: 1 per course
Prerequisite: Official promotion to or placement in high school; Director Approval
The Path-College/Career Prep courses advance intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. The Path secondary course series focuses on developing the habits and skills that are expected in college study and the workforce. High school Path students develop personal, interpersonal, and cognitive skills that are essential to productivity in both the collegiate and business worlds.

Career and Technical Education

The Sharyland ISD Career and Technical Education (CTE) Department offers various programs that enable our students to prepare for college and careers. These programs consist of a sequence of courses related to specific areas of focus, also known as career clusters, each providing students with coherent and rigorous content. CTE content is aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare students for further education and careers in current or emerging professions.

The Sharyland ISD Career and Technical Education (CTE) Department provides direction and leadership for all CTE programs in the district. It focuses on: ensuring the implementation of the CTE Texas Essential Knowledge and Skills (TEKS); ensuring that adequate equipment and materials are readily available for the delivery of instruction; offering a wide array of college and career events; developing and maintaining business/community partnerships; and overall, on improving our established CTE programs.



Sharyland ISD CTE Program Career Cluster Offerings

Agriculture, Food & Natural Resources

The Agriculture, Food, and Natural Resources (AFNR) 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. Courses in the AFNR Career Cluster are designed to prepare learners for careers in the planning, production, processing, marketing, distribution, financing, and development of agricultural commodities, services, and natural resources, including food, fiber, wood products, water, minerals, and petroleum.

Architecture & Construction

The Architecture and Construction Career Cluster® focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview of the various fields of architecture, interior design, and construction management.

Arts, A/V Technology & Communications

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.

Business Management & Administration

Finance

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

The Finance Career Cluster® encompasses careers that focus on planning, services for financial and investment planning, banking, insurance, and business financial management. Careers in this field require problem-solving, organization, and communication skills.

Education & Training

The Education and Training Career Cluster® focuses on planning, managing, and providing education and training services and related learning support services. All parts of courses are designed to introduce learners to the various careers available within the Education and Training career cluster.

Health Science

The Health Science Career Cluster® 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, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

Hospitality & Tourism

The Hospitality and Tourism Career Cluster® focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.

Law, Public Safety, Corrections & Security

The Law, Public Safety, Corrections, and Security Career Cluster® focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services.

Science, Technology, Engineering & Mathematics

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.

Career and Technical Student Organizations (CTSOs)

The United States Department of Education (USDE) recognizes the value of Career and Technical Student Organizations (CTSOs) and their place as an integral part of Career and Technical Education (CTE). The State of Texas and the Texas Education Code also recognize the importance and value CTSOs have for teachers and students. Sharyland ISD encourages all CTE students to become involved in one or more CTSOs to foster collaboration, leadership development, and healthy competition.

The Career and Technical Student Organizations currently offered at Sharyland ISD are as follows:

	Business Professionals of America (BPA) Business Professionals of America has a history as a student organization that contributes to the preparation of a world- class workforce through the advancement of leadership, citizenship, academic, and technological skills. Through co- curricular programs and services, members of Business Professionals of America compete in demonstrations of their business technology skills, develop their professional and leadership skills, network with one another and professionals across the nation, and get involved in the betterment of their community through good works projects.
	Family, Career and Community Leaders of America (FCCLA) Family, Career, and Community Leaders of America (FCCLA) is a dynamic and effective national student organization that helps young men and women become leaders. Family and Consumer Sciences education. Involvement in FCCLA offers members the opportunity to expand their leadership potential and develop skills for life - planning, goal setting, problem-solving, decision making, and interpersonal communication-all necessary in the home and workplace.
	National Future Farmers of America (FFA) Future Farmers of America (FFA) is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education. FFA develops members' potential and helps them discover their talent through hands-on experiences, which give members the tools to achieve real-world success. Members are future chemists, veterinarians, government officials,
	For Inspiration and Recognition of Science and Technology (FIRST) The mission of FIRST is to inspire young people to be science and technology leaders and innovators by engaging them in exciting mentor-based programs that build science, engineering, and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, leadership.

Health Occupations Students of America (HOSA)

Health Occupations Students of America (HOSA) is a national student organization with a mission to promote career opportunities in the healthcare industry and to enhance the delivery of quality health care for all people. HOSA provides a unique program of leadership development, motivation, and recognition exclusively for students enrolled in health science education and biomedical science programs or have interests in pursuing careers in health professions.

SkillsUSA

SkillsUSA is a national organization serving students who are preparing for careers in trade, technical and skilled service occupations. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel in leadership skills, technical and engineering skills, and occupationally related skills in 12 of the 16 career cluster areas. All students in Career and Technical Education programs are eligible for membership.

Texas Public Service Association (TPSA)

TXPSTA is fully committed to the educating of Students/Cadets through the development and delivery of high-quality lecture and hands-on training. As education professionals, we are committed to the safety and security of our students/cadets, and improved understanding between society and the criminal justice system.

Texas Public Service Association (TPSA)

Texas Public Service Association (TPSA) is a co-curricular non-profit student organization across the state of Texas that provides Law, Public Safety, Corrections, and Security students with knowledge, skills, leadership, and student growth through real world career preparation, experience, training, and competition opportunities. TPSA focuses on expanding the knowledge of current students enrolled in the Law Public Safety Corrections and Security (LPSCS) Career and Technical Education (CTE) career cluster.

Career Development Coursework

The Sharyland ISD offers various courses that allow students to participate in work-based learning experiences. These courses are:

- Career Preparation I/Extended Career Preparation
- Career Preparation II/Extended Career Preparation
- Project-Based Research

Career Preparation I/Extended Career Preparation TEA # 12701305 Course # 0531 & 2531

Grade Placement: 11-12
Credit: 3
Prerequisite: Successful completion of one or more advanced career and technical education courses that are part of a coherent sequence of courses in a Career Cluster related to the field in which the student will be employed.
Corequisites: Career Preparation I.
Extended Career Preparation provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.
Note: This course requires a Course Interest Form to be submitted and requires students to have either paid or unpaid employment. The employment site is typically selected by each individual student to ensure it correlates to their specific career interest area. Employment sites should be located within our surrounding community to allow our Career Prep teachers to conduct the required employer site visits.

Career Preparation II/Extended Career Preparation TEA # 12701405 Course # 3531 & 5531

Grade Placement: 12
Credit: 3
Prerequisite: Successful completion of one or more advanced career and technical education courses that are part of a coherent sequence of courses in a Career Cluster related to the field in which the student will be employed.
Corequisites: Career Preparation II.
Extended Career Preparation provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.
Note: This course requires a Course Interest Form to be submitted and requires students to have either paid or unpaid employment. The employment site is typically selected by each individual student to ensure it correlates to their specific career interest area. Employment sites should be located within our surrounding community to allow our Career Prep teachers to conduct the required employer site visits.

Project-Based Research

TEA # 12701500 (First Time Taken)
TEA # 12701510 (Second Time Taken)
TEA # 12701520 (Third Time Taken)
Course # 0530

Grade Placement: 11-12
Credit: 1
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.

Agriculture, Food, and Natural Resources Courses at a Glance

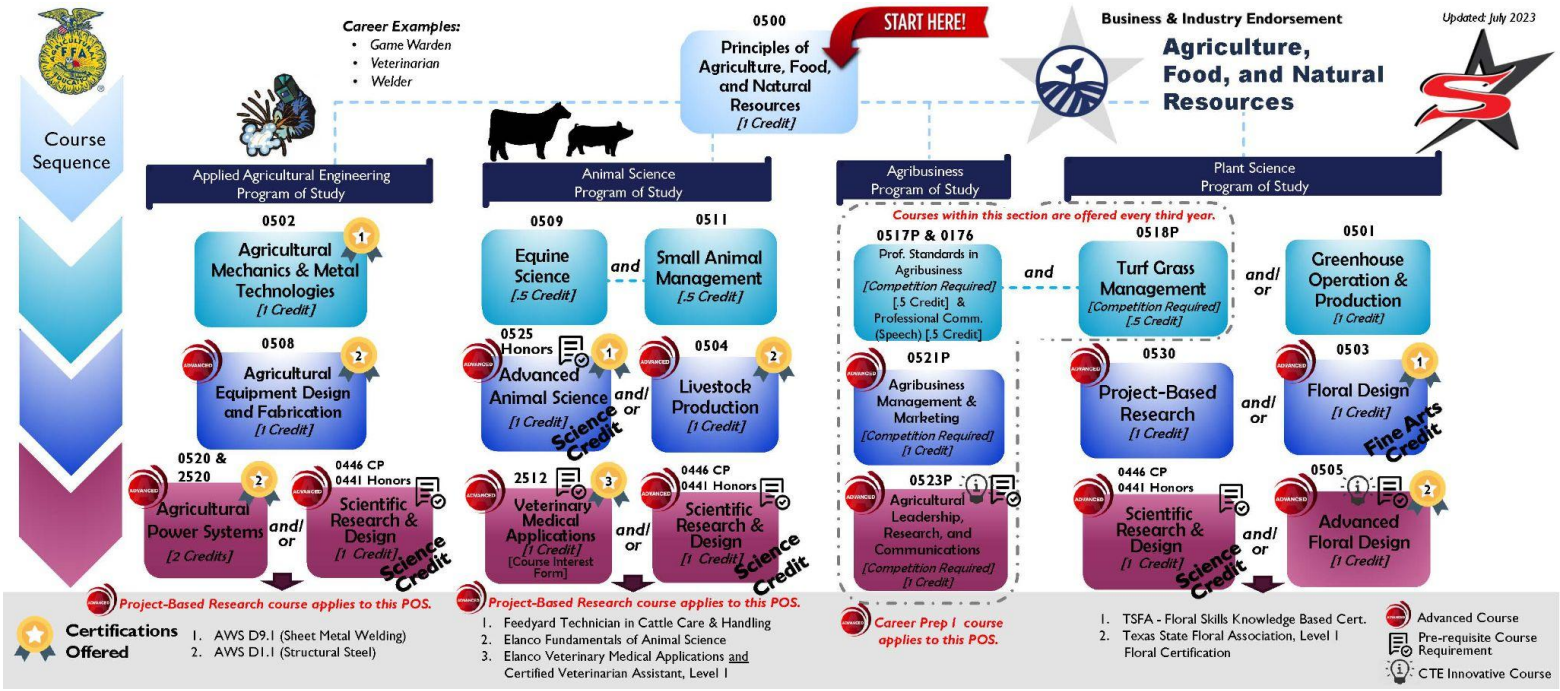
The table that follows is a summary of the career and technical education courses we offer within the Agriculture, Food, and Natural Resources career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS OTHER GRAD REQ.
0500	Principles of Agriculture, Food, and Natural Resources	1	-	-
0525	Advanced Animal Science Honors	1	Yes	Science
0505	Advanced Floral Design	1	Yes	-
0521P	Agribusiness Management and Marketing	1	Yes	-
0508	Agricultural Equipment Design and Fabrication	1	Yes	-
0523P	Agricultural Leadership, Research, and Communications	1	Yes	-
0502	Agricultural Mechanics and Metal Technologies	1	-	-
0520 & 2520	Agricultural Power Systems	2	Yes	-
0509	Equine Science	0.5	-	-
0503	Floral Design	1	Yes	Fine Arts
0501	Greenhouse Operation & Production	1	-	-
0504	Livestock Production	1	Yes	-
0517P	Professional Standards in Agribusiness	0.5	-	-
0511	Small Animal Management	0.5	-	-
0518P	Turf Grass Management	0.5	-	-
2512	Veterinary Medical Applications	1	Yes	-
0531 & 2531	Career Preparation I (Career Development Course)	3	Yes	-

0176	Professional Communications (Arts, A/V Technology, and Communications Course)	0.5	-	-
0178D	STC Introduction to Speech Communications 1311 (Arts, A/V Technology, and Communications course)	0.5	-	-
0530	Project-Based Research (Career Development Course)	1	Yes	-
0446 (CP) 0441 (Honors)	Scientific Research and Design (STEM Course)	1	Yes	Science

Agriculture, Food, and Natural Resources Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the *Agriculture, Food, and Natural Resources* career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Agriculture, Food, and Natural Resources* course. After this course, students will need to decide which Program of Study (POS) to pursue and then follow the pertinent course sequence. Students are encouraged to select the Program of Study that best matches their college and/or career goals. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



The Texas Education Agency (TEA) engaged members of the workforce, secondary education, and higher education to advise on the development of the Programs of Study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

The next few pages outline the Agriculture, Food & Natural Resources Programs of Study that we offer within our district, which are as follows:

- Applied Agricultural Engineering
- Animal Science
- Agribusiness
- Plant Science

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes 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.

Applied Agricultural Engineering
Statewide Program of Study

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.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Agriculture, Food, and Natural Resources [1 credit]

Level 2
- Agricultural Mechanics and Metal Technologies [1 Credit]

Level 3
- Agricultural Equipment Design and Fabrication [1 Credit] **(Advanced Course)**

Level 4
- Agricultural Power Systems [2 Credits] **(Advanced Course)**
- Project-Based Research [1 Credit] **(Advanced Course)**
- Scientific Research and Design [1 Credit] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Heavy Equipment Maintenance Technology/ Technician
- Agricultural Mechanization, General
- Small Engine Mechanics and Repair Technology/ Technician
- Welding Technology/ Welder

Bachelor's Degrees
- Agricultural Engineering
- Agricultural Mechanization, General

Master's, Doctoral, and Professional Degrees
- Agricultural Engineering
- Agricultural Mechanization, Genera

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Tour a farm products or machinery plant • Participate in Texas FFA	• Earn a welding certification • Intern at a farm products or machinery plant • Participate in an FFA supervised agriculture experience

Sharyland ISD
Industry-Based Certifications

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

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Outdoor Power Equipment and Other Small Engine Mechanics	$32,406	366	16%
Welders	$41,350	6171	9%
Farm Equipment Mechanics and Service Technicians	$39,915	304	17%
Mobile Heavy Equipment Mechanics	$47,299	1627	16%
Agricultural Engineers	$64,792	9	13%

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 – August 2022

Applied Agricultural Engineering
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Agricultural Mechanics and Metal Technologies	13002200 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Agricultural Equipment Design and Fabrication	13002350 (1 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Agricultural Power Systems	13002400 (2 credits)	None	None
Project-Based Research	12701500 (1 credit)	None	None
Scientific Research and Design	13037200 (1 credit)	Biology, Chemistry, Integrated Physics, and Chemistry (IPC),or Physics	

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes 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.

Animal Science
Statewide Program of Study

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.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Agriculture, Food, and Natural Resources [1 Credit]

Level 2
- Equine Science [.5 Credit]
- Small Animal Management [.5 Credit]

Level 3
- Livestock Production [1 Credit] **(Advanced Course)**
- Advanced Animal Science [1 Credit] **(Advanced Course)**

Level 4
- Veterinary Medical Applications [1 Credit] **(Advanced Course)**
- Project-Based Research [1 Credit] **(Advanced Course)**
- Scientific Research and Design **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Food Science and Technology
- Veterinary Studies
- Biotechnology Laboratory Technician
- Biology Technician

Bachelor's Degrees
- Animal Sciences
- Agriculture
- Biology
- Zoology/ Animal Biology

Master's, Doctoral, and Professional Degrees
- Genetics
- Veterinary Medicine
- Biological and Physical Sciences
- Biological and Biomedical Sciences

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Texas FFA	• Compete in an Agri-Science Fair 4H • Volunteer at a local farm or with a veterinarian • Participate in an FFA supervised agriculture experience

Sharyland ISD
Industry-Based Certifications

- Certified Veterinary Assistant, Level 1
- Elanco Fundamentals of Animal Science Certification
- Elanco Veterinary Medical Applications Certification
- Feedyard Technician in Cattle Care and Handling

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Animal Breeders	$39,139	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%

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 – August 2022

Animal Science
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Equine Science	13000500 (0.5 credit)	None	None
Small Animal Management	13000400 (0.5 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Livestock Production	13000300 (1 credit)	None	None
Advanced Animal Science	13000700 (1 credit)	Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Veterinary Medical Applications	13000600 (1 credit)	Equine Science, Small Animal Management, or Livestock Production	None
Project-Based Research	12701500 (1 credit)	None	None
Scientific Research and Design	13037200 (1 credit)	Biology, Chemistry, Integrated Physics, and Chemistry (IPC), or Physics	None

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes 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.

Agribusiness
Statewide Program of Study

The Agribusiness program of study explores the occupations and educational opportunities associated with the business of farming and agriculturally related business that supplies farm inputs, such as machinery and seeds. This program of study may also include exploration into the marketing of farm products, the purchase of farm products either for further processing or resale and grading or classifying unprocessed food or other agricultural products.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Agriculture, Food, and Natural Resources [1 Credit]

Level 2
- Professional Standards in Agribusiness [.5 Credit]
- Professional Communications [.5 Credit]

Level 3
- Agribusiness Management and Marketing [1 credit] **(Advanced Course)**

Level 4
- Agricultural Leadership, Research, and Communications [1 credit] **(Advanced Course)**
- Career Preparation I [2 credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Agricultural Business and Management, General
- Banking and Financial Support Services
- Advertising
- Marketing/ Marketing Management, General

Bachelor's Degrees
- Agricultural Business and Management, General
- Finance, General
- Financial Mathematics
- Marketing/ Marketing Management, General

Master's, Doctoral, and Professional Degrees
- Agricultural Business and Management, General
- Finance, General
- Financial Mathematics
- Marketing/ Marketing Management, General

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Tour a farm machinery products company • Participate in Texas FFA	• Intern with a farm machinery products company • Work on a farm or ranch

Sharyland ISD
Industry-Based Certifications

None

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Farmers, Ranchers, and Other Agricultural Managers	$59.134	405	9%
Farm and Ranch Loan Officers	$45,594	268	25%
Buyers and Purchasing Agents, Farm Products	$46,488	268	20%

Successful completion of the Agribusiness program of study will fulfill requirements of the Business and Industry Endorsement. Revised – August 2022

Agribusiness
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Professional Standards in Agribusiness	13000800 (.5 credit)	None	None
Professional Communications	13009900 (.5 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Agribusiness Management and Marketing	13000900 (1 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Agricultural Leadership, Research, and Communications	N1300266 (1 credit)	One credit from courses in the Agriculture, Food, and Natural Resources Career Cluster	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life - food, water, land, and air. This career cluster includes 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.

Plant Science
Statewide Program of Study

The Plant Science program of study focuses on the science, research, and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Agriculture, Food, and Natural Resources [1 Credit]

Level 2
- Turf Grass Management [.5 Credit]
- Greenhouse Operation and Production [1 credit]

Level 3
- Floral Design [1 credit] **(Advanced Course)**

Level 4
- Advanced Floral Design [1 credit] **(Advanced Course)**
- Project-Based Research [1 credit] **(Advanced Course)**
- Scientific Research and Design [1 credit] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Applied Horticulture/ Horticulture Operations, General
- Ornamental Horticulture
- Agricultural Business and Management, General
- Turf and Turfgrass Management

Bachelor's Degrees
- Applied Horticulture/ Horticulture Operations, General
- Agronomy and Crop Science
- Agricultural Business and Management, General
- Turf and Turfgrass Management

Master's, Doctoral, and Professional Degrees
- Applied Horticulture/ Horticulture Operations, General
- Agronomy and Crop Science
- Agricultural Business and Management, General
- Farm/Farm and Ranch Management

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Texas FFA	• Work at a florist or landscaper business • Participate in an FFA supervised agriculture experience

Sharyland ISD
Industry-Based Certifications

- Texas State Florist's Association Knowledge Based Floral Certification
- Texas State Florist's Association Level I Floral Certification

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Soil and Plant Scientists	$54,662	116	21%
Tree Trimmers and Pruners	$32,240	589	14%
Pesticide Handlers, Sprayers, and Applicators	$36.733	196	22%
Landscaping Supervisors	$44,408	807	19%
Biological Technicians	$42,931	452	17%

Successful completion of the Plant 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 – August 2022

Plant Science
Course information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Turf Grass Management	13001950 (.5 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Floral Design	13001800 (1 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Advanced Floral Design	N1300270 (1 credit)	Floral Design	None
Project-Based Research	12701500 (1 credit)	None	None
Scientific Research and Design	13037200 (1 credit)	Biology, Chemistry, Integrated Physics and Chemistry (IPC), or Physics	None

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Agriculture, Food, and Natural Resources Certifications

The table below summarizes the CTE certifications that are offered within the Agriculture, Food, and Natural Resources career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
Advanced Welding Society (AWS) D9.1 Sheet Metal Welding	*Agricultural Mechanics & Metal Technologies*
Advanced Welding Society (AWS) D1.1 Structural Steel	*Agricultural Equipment Design & Fabrication*
Advanced Welding Society (AWS) D1.1 Structural Steel	*Agricultural Power Systems*
Texas State Floral Association Floral Skills Knowledge Based Certification	*Floral Design*
Texas State Floral Association, Level 1	*Advanced Floral Design*
Certified Veterinarian Assistant, Level 1	*Veterinary Medical Applications/Lab*
Elanco Veterinary Medical Applications	*Veterinary Medical Applications/Lab*
Feedyard Technician in Cattle Care & Handling	*Advanced Animal Science*
Elanco Fundamentals of Animal Science	*Livestock Production*

Agriculture, Food, and Natural Resources Courses Descriptions

Principles of Agriculture, Food, and Natural Resources TEA # 13000200 Course # 0500

Grade Placement: 9-12
Credit: 1
This course allows students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations.

Advanced Animal Science (Honors) TEA # 13000700 Course # 0525

Grade Placement: 11–12
Credit: 1
Prerequisites: Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production
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.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Advanced Floral Design TEA # N1300270 Course # 0505

Grade Placement: 11–12
Credit: 1
Prerequisites: Floral Design
In this course, students build on the knowledge from the Floral Design course and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced floral design and providing students with a thorough understanding of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of a specific occasion or event. Through the analysis and evaluation of various occasion and event types, students explore the design needs and expectations of clients and propose and evaluate appropriate creations. From conception to evaluation, students are challenged to create and design appropriate specialty floral designs that meet the needs of the client. Furthermore, an emphasis on budgetary adherence and entrepreneurship equips students with many of the necessary skills needed for success in floral enterprises.

Agribusiness Management and Marketing TEA # 13000900 Course # 0521P

Grade Placement: 10-12
Credit: 1
This course is designed to provide a foundation to agribusiness management and the free enterprise system. Instruction includes the use of economic principles such as supply and demand, budgeting, record keeping, finance, risk management, business law, marketing, and careers in agribusiness.
Note: This course is only offered once every three years and has a competition requirement.

Agricultural Equipment Design and Fabrication TEA # 13002350 Course # 0508

Grade Placement: 11–12
Credit: 1
Recommended Prerequisites: Agricultural Mechanics and Metal Technologies
In this course, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment.

Agricultural Leadership, Research, and Communications TEA # N1300266 Course # 0523P

Grade Placement: 10–12
Credit: 1
Prerequisites: One credit from courses in the Agriculture, Food, and Natural Resources Career Cluster
Agricultural Leadership, Research and Communications will focus on challenging Agriculture, Food, and Natural Resources (AFNR) students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.
Note: This course is only offered once every three years and has a competition requirement.

Agricultural Mechanics and Metal Technologies TEA # 13002200 Course # 0502

Grade Placement: 10–12
Credit: 1
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.

Agricultural Power Systems TEA # 13002400 Course # 0520 & 2520

Grade Placement: 11–12
Credit: 2
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.

Equine Science TEA # 13000500 Course # 0509

Grade Placement: 10-12
Credit: 0.5
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.

Floral Design TEA # 13001800 Course # 0503

Grade Placement: 11–12
Credit: 1
Floral Design is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students will develop respect for the traditions and contributions of diverse cultures. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.
Note: This course can satisfy a fine arts credit requirement for students on the Foundation High School Program.

Greenhouse Operation and Production TEA # 13002050 Course # 0501

Grade Placement: 10–12
Credit: 1
Greenhouse Operation and Production is designed to develop an understanding of greenhouse production techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire

technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Livestock Production TEA # 13000300 Course # 0504

Grade Placement: 10-12
Credit: 1
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.

Professional Standards in Agribusiness TEA # 13000800 Course # 0517P

Grade Placement: 10-12
Credit: 0.5
Professional Standards in Agribusiness primarily focuses on leadership, communication, employer-employee relations, and problem solving as they relate to agribusiness.
Note: This course is only offered once every three years and has a competition requirement.

Small Animal Management TEA # 13000400 Course # 0511

Grade Placement: 10-12
Credit: 0.5
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.

Turf Grass Management TEA # 13001950 Course # 0518P

Grade Placement: 10-12
Credit: 0.5
Turf Grass Management is designed to develop an understanding of turf grass management techniques and practices.
Note: This course is only offered once every three years and has a competition requirement.

Veterinary Medical Applications TEA # 13000600 Course # 2512

Grade Placement: 12
Credit: 1
Prerequisites: Equine Science and Small Animal Management; or Livestock Production
Veterinary Medical Applications covers topics relating to veterinary practices, including practices for large and small animal species.
Note: This course requires a Course Interest Form to be submitted.

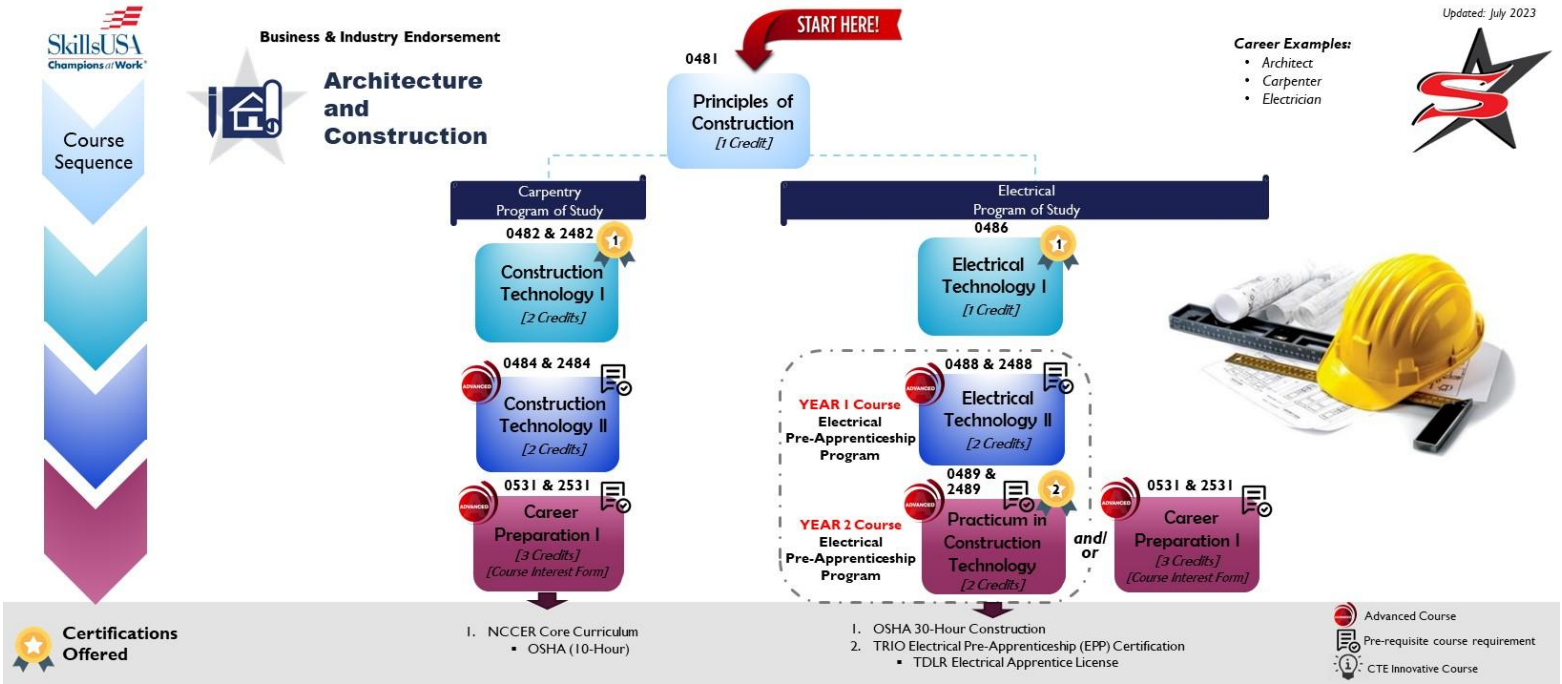
Architecture & Construction Courses at a Glance

The table that follows is a summary of the career and technical education courses we offer within the Architecture & Construction career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS OTHER GRAD. REQ.
0481	Principles of Construction	1	-	-
0482 & 2482	Construction Technology I	2	-	-
0484 & 2484	Construction Technology II	2	Yes	-
0486	Electrical Technology I	1	-	-
0488 & 2488	Electrical Technology II	2	Yes	-
0489 & 2489	Practicum in Construction Technology	2	Yes	-
0531 & 2531	Career Preparation I (Career Development Course)	3	Yes	-

Architecture & Construction Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Architecture and Construction career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Construction* course. After this course, students will need to decide which Program of Study (POS) to pursue and then follow the pertinent course sequence. Students are encouraged to select the Program of Study that best matches their college and/or career goals. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



The Texas Education Agency (TEA) engaged members of the workforce, secondary education, and higher education to advise on the development of the Programs of Study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

The next few pages outline the Architecture & Construction Programs of Study that we offer within our district, which are as follows:

- Carpentry
- Electrical

Architecture and Construction Career Cluster

The Architecture and Construction Career Cluster focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

Carpentry
Statewide Program of Study

The Carpentry program of study explores the occupations and educational opportunities related to constructing, installing, or repairing structures and fixtures made of wood, such as concrete forms (including frameworks, partitions, joists, studding, rafters, and stairways). This program of study may also include exploration into installing, dismantling, or moving machinery and heavy equipment according to layout plans, blueprints, or other drawings.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Construction [1 Credit]

Level 2
- Construction Technology I [2 Credits]

Level 3
- Construction Technology II [2 Credits] **(Advanced Course)**

Level 4
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Carpentry/Carpenter
- Industrial Mechanics and Maintenance Technology

Bachelor's Degrees
- Construction Science

Master's, Doctoral, and Professional Degrees
- Construction Management

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Shadow a carpenter or millwright • Participate in SkillsUSA	• Obtain an NCCER certification in Millwright Level 1 or Carpentry Level 1

Sharyland ISD
Industry-Based Certifications

- NCCER Core

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Carpenters	$35,922	5,031	26%
Cost Estimators	$63,939	2,239	21%

Successful completion of the Carpentry program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

Carpentry
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Construction	13004220 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Construction Technology I	13005100 (2 credits)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Construction Technology II	13005200 (2 credits)	Construction Technology I	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Architecture and Construction Career Cluster

The Architecture and Construction Career Cluster focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

Electrical
Statewide Program of Study

The Electrical program of study explores the occupations and educational opportunities associated with installing, maintaining, and repairing electrical wiring, equipment, and fixtures. This program of study may also include exploration into installing and repairing telecommunications cable including fiber optics.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Construction [1 Credit]

Level 2
- Electrical Technology I [1 Credit]

Level 3
- Electrical Technology II [2 Credits] **(Advanced Course)**

Level 4
- Practicum in Construction Technology [2 Credits] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Electrician
- Communications Systems Installation and Repair Technology

Bachelor's Degrees
- Construction Science

Master's, Doctoral, and Professional Degrees
- Construction Management

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Shadow an electrician or fiber optics line installer • Participate in SkillsUSA	• Intern or shadow an electrician

Sharyland ISD
Industry-Based Certifications

- TRIO Electrical Pre-Apprenticeship (EPP) Certification

- OSHA 30 Hour Construction*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Electrical Linemen	$54,184	1,314	28%
Electricians	$44,013	8,460	21%
Electrical and Electronics Installers	$37,544	245	19%
Security and Fire Alarm Installers	$43,638	1,112	22%
Telecommunication Line Installers and Repairers	$49,150	1,228	10%

Successful completion of the Electrical program of study will fulfill requirements of the Business and Industry endorsement and STEM endorsement if the math and science requirements are met. Revised – August 2022

Electrical
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Construction	13004220 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES (CREQ)
Electrical Technology I	13005600 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Electrical Technology II	13005700 (2 credits)	Electrical Technology I	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Construction Technology	13005250 (2 credits)	Construction Technology II; Building Maintenance Technology II; Electrical Technology II; Heating, Ventilation Air Conditioning (HVAC) and Refrigeration Technology II; Plumbing Technology I; or Mill and Cabinetmaking Technology	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Architecture & Construction Certifications

The table below summarizes the CTE certifications that are offered within the Architecture & Construction career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
National Center for Construction Education and Research (NCCER) Core Curriculum	*Construction Technology I*
Occupational Safety and Health Administration (OSHA) 30-Hour Construction	*Electrical Technology I*
TRIO Electrical Pre-Apprenticeship (EPP) Certification	*Electrical Technology II (Year 1 of 2)* and *Practicum in Construction Technology (Year 2 of 2)* Note: Must complete Year 1 & 2 Curriculum to earn IBC
Occupational Safety and Health Administration (OSHA) 10-Hour (Not on TEA IBC List for Public School Accountability)	*Construction Technology I*

Architecture & Construction Course Descriptions

Principles of Construction — TEA # 13004220 — Course # 0481

Grade Placement: 9-12
Credits: 1
Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

Construction Technology I — TEA # 13005100 — Course # 0482 & 2482

Grade Placement: 10-12
Credits: 2
Recommended Prerequisite: Principles of Construction or Principles of Architecture
In Construction Technology I, students will gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in safety, tool usage, building materials, codes, and framing.

Construction Technology II — TEA # 13005200 — Course # 0484 & 2484

Grade Placement: 11-12
Credits: 2
Prerequisite: Construction Technology I
In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills.

Electrical Technology I — TEA # 13005600 — Course # 0486

Grade Placement: 10–12
Credit: 1
Recommended Prerequisites: Principles of Architecture or Principles of Construction
In Electrical Technology I, students will gain knowledge and skills needed to enter the workforce as an electrician or building maintenance supervisor, prepare for a postsecondary degree in a specified field of construction or construction management, or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, and the reading of electrical drawings, schematics, and specifications.

Electrical Technology II — TEA # 13005700 — Course # 0488 & 2488

Grade Placement: 11–12
Credit: 2
Prerequisite: Electrical Technology I
Recommended Prerequisites: Principles of Architecture or Principles of Construction
In Electrical Technology II, students will gain advanced knowledge and skills needed to enter the workforce as an electrician, a building maintenance technician, or a supervisor; prepare for a postsecondary degree in a specified field of construction or construction management; or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, alternating current and direct current motors, conductor installation, installation of electrical services, and electric lighting installation.

Practicum in Construction Technology

Course # 0489 & 2489

TEA # 13005250 (First Time Taken)

TEA # 13005260 (Second Time Taken)

Grade Placement: 12
Credit: 2
Prerequisites: Construction Technology II; or Electrical Technology II
In Practicum in Construction Technology, students will be challenged with the application of knowledge and skills gained in previous construction-related coursework. In many cases students will be allowed to work at a job (paid or unpaid) outside of school or be involved in local projects the school has approved for this class.

Arts, A/V Technology & Communications Courses at a Glance

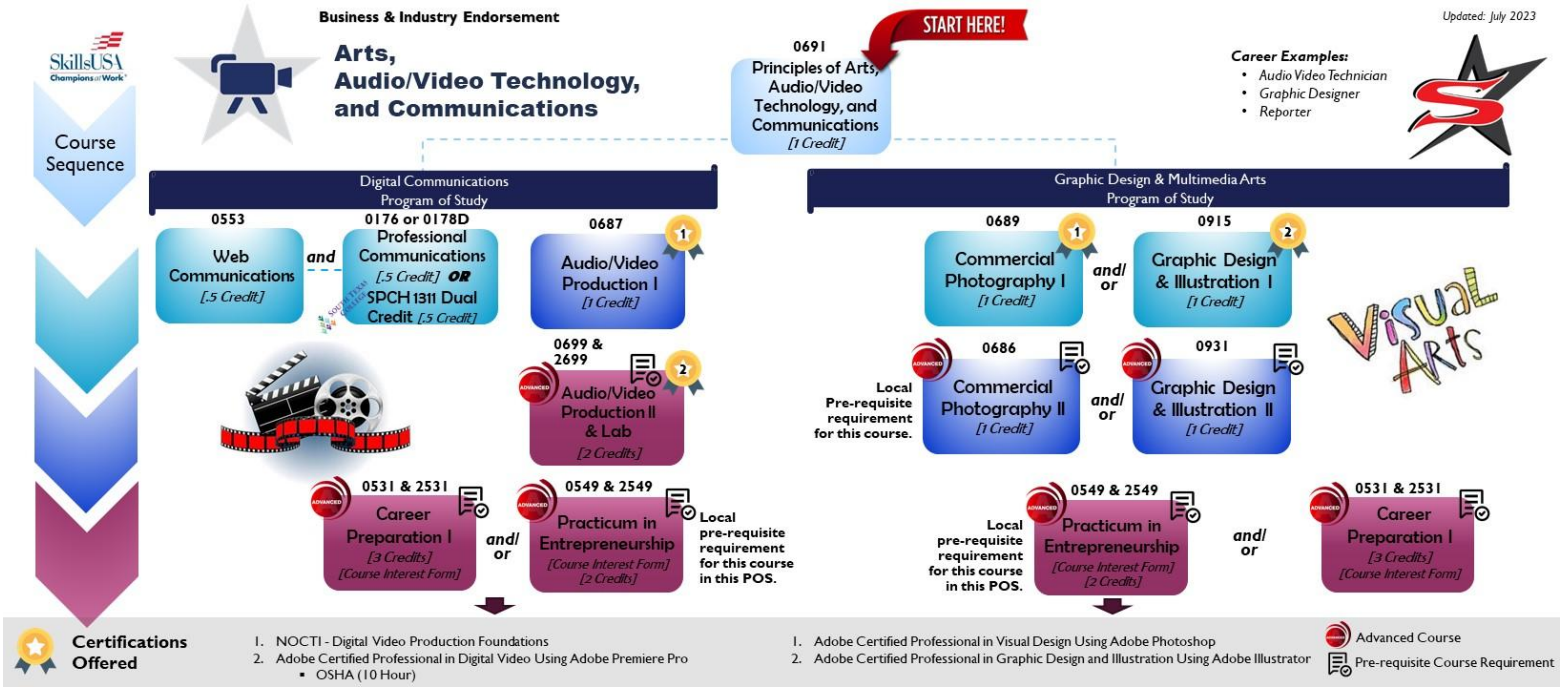
The table that follows is a summary of the career and technical education courses we offer within the Arts, Audio Visual Technology, and Communications career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS OTHER GRAD. REQ.
0691	Principles of Arts, Audio/Video Technology, and Communications	1	-	-
0687	Audio/Video Production I	1	-	-
0699 & 2699	Audio/Video Production II & Lab	2	Yes	-
0689	Commercial Photography I	1	-	-
0686	Commercial Photography II	1	Yes	-
0915	Graphic Design and Illustration I	1	-	-
0931	Graphic Design and Illustration II	1	Yes	-
0176	Professional Communications	0.5	-	-
0178D	STC Introduction to Speech Communications 1311	0.5	-	-
0553	Web Communications	0.5	-	-
0531 & 2531	Career Preparation I (Career Development Course)	3	Yes	Yes
0549 & 2549	Practicum in Entrepreneurship (Business, Marketing, and Finance Course)	2	Yes	Yes

Arts, A/V Technology & Communications

Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Arts, A/V Technology and Communications career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Arts, Audio/Video Technology, and Communications* course. After this course, students will need to decide which Program of Study (POS) to pursue and then follow the pertinent course sequence. Students are encouraged to select the Program of Study that best matches their college and/or career goals. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



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The next few pages outline the Arts, Audio Visual Technology, and Communications Programs of Study that we offer within our district, which are as follows:

- Digital Communications
- Graphic Design & Multimedia Arts

Arts, Audio/Video Technology, and Communications Career Cluster

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.

Digital Communications
Statewide Program of Study

The Digital Communications program of study explores the occupations and educational opportunities associated with the production of audio and visual media formats for various purposes, such as TV broadcasts, advertising, video production, or motion pictures. This program of study may also include exploration into operating machines and equipment to record sound and images, such as microphones, sound speakers, video screens, projectors, video monitors, sound and mixing boards, and related electronic equipment.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Arts, Audio/Video Technology, and Communications [1 Credit]
- Web Communications [.5 Credit]
- Professional Communications [.5 Credit]

Level 2
- Audio/Video Production I [1 Credit]

Level 3
- Audio/Video Production II/Lab [2 Credits] **(Advanced Course)**

Level 4
- Practicum in Entrepreneurship [2 Credits] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Recording Arts Technology/Technician
- Cinematography and Film/Video Production
- Radio and Television Broadcasting Technology/Technician
- Music Technology

Bachelor's Degrees
- Recording Arts Technology/Technician
- Cinematography and Film/Video Production
- Radio and Television
- Agricultural Communication/Journalism

Master's, Doctoral, and Professional Degrees
- Communications Technology/Technician
- Cinematography and Film/Video Production
- Radio and Television
- Agricultural Communication/Journalism

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Shadow a production team • Participate in SkillsUSA or TSA	• Intern at a local television station or video production company • Work with a local company on a project

Sharyland ISD
Industry-Based Certifications

- Adobe Certified Professional in Digital Video Using Adobe Premier Pro
- Digital Video Production Foundations

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Sound Engineering Technicians	$39,562	79	27%
Camera Operators, Television, Video, and Motion Picture	$50,024	129	9%
Audio and Video Equipment Technicians	$40,581	757	29%
Film and Video Editors	$47,382	118	23%

Successful completion of the Digital Communications program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

Digital Communications
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Arts, A/V Technology, and Communications	13008200 (1 credit)	None	None
Web Communications	03580810 (.5 credit)	None	None
Professional Communication	13009900 (.5 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Audio/Video Production I	13008500 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES (CREQ)
Audio/Video Production II/Lab	13008610 (2 credits)	Audio/Video Production I	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Arts, Audio/Video Technology, and Communications Career Cluster

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.

Graphic Design & Multimedia Arts
Statewide Program of Study

The Graphic Design and Multimedia Arts 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.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Arts, A/V Technology, and Communications [1 Credit]

Level 2
- Graphic Design and Illustration I [1 Credit]
- Commercial Photography I [1 Credit]

Level 3
- Graphic Design and Illustration II [1 Credit] **(Advanced Course)**
- Commercial Photography II [1 Credit] **(Advanced Course)**

Level 4
- Practicum in Entrepreneurship [2 Credits] **(Advanced Course)**
- Career Preparation I [3Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Game and Interactive Media Design

Bachelor's Degrees
- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Game and Interactive Media Design

Master's, Doctoral, and Professional Degrees
- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Intermedia/Multimedia

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join a website development or coding club • Participate in SkillsUSA or TSA	• Intern with a multimedia or animation studio • Obtain a certificate or certification in graphic design

Sharyland ISD
Industry-Based Certifications

- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator
- Adobe Certified Professional in Visual Design Using Adobe Photoshop

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Graphic Designers	$44,824	1,433	15%
Multimedia Artists and Animators	$67,392	186	21%

Successful completion of the Graphic Design & Multimedia Arts program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

Graphic Design & Multimedia Arts
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Arts, A/V Technology, & Communications	13008200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Graphic Design and Illustration I	13008800 (1 credit)	None	None
Commercial Photography I	13009100 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Graphic Design and Illustration II	13008900 (1 credit)	Graphic Design and Illustration I	None
Commercial Photography II	13009200 (1 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ)	COREQUISITES (CREQ)
Career Preparation I	12701305 (3 credits)	None	None
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Arts, A/V Technology & Communications Certifications

The table below summarizes the CTE certifications that are offered within the Arts, A/V Technology & Communications career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
Adobe Certified Professional in Visual Design Using Adobe Photoshop	*Commercial Photography I*
Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator	*Graphic Design and Illustration I*
NOCTI - Digital Video Production Foundations	*A/V Production I*
Adobe Certified Professional in Digital Video Using Adobe Premiere Pro	*A/V Production II*
Occupational Safety and Health Administration (OSHA) 10-Hour (Not on TEA IBC List for Public School Accountability)	*A/V Production II*

Arts, A/V Technology & Communications
Course Descriptions

Principles of Arts, Audio/Video Technology and Comm. TEA # 13008200 Course # 0691

Grade Placement: 9-12
Credit: 1
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 in this cluster and the knowledge, skills, and educational requirements for those opportunities.

Audio/Video Production I TEA # 13008500 Course # 0687

Grade Placement: 10–12
Credits: 1
Recommended Prerequisite: Principles of Arts, Audio/Video Technology, and Communications
In addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video products.

Audio/Video Production II & Lab TEA # 13008610 Course # 0699 & 2699

Grade Placement: 11–12
Credits: 2
Prerequisite: Audio/Video Production I Corequisite: Audio/Video Production II
Building upon the concepts taught in Audio/Video Production, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post- production products. Through diverse forms of storytelling and production, students will exercise and develop creativity, intellectual curiosity, and critical-thinking, problem-solving, and collaborative skills. This course may be implemented in an audio format or a format with both audio and video. Requiring a lab requisite for the course affords necessary time devoted specifically to the production and post-production process.

Commercial Photography I TEA # 13009100 Course # 0689

Grade Placement: 10–12
Credits: 1
In addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

Commercial Photography II TEA # 13009200 Course # 0686

Grade Placement: 11–12
Credits: 1
Local Prerequisite: Commercial Photography I
In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs.

Graphic Design and Illustration I TEA # 13008800 Course # 0915

Grade Placement: 10–12
Credits: 1
Recommended Prerequisite: Principles of Arts, Audio/Video Technology, and Communications

Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design.

Graphic Design and Illustration II — TEA # 13008900 — Course # 0931

Grade Placement: 11–12
Credits: 1
Prerequisite: Graphic Design and Illustration I
Within this context, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills.

Professional Communications — TEA # 13009900 — Course # 0176

Grade Placement: 9–12
Credits: .5
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.

STC Professional Communications Dual Credit — TEA # 13009900 — Course # 0178D

Grade Placement: 9–12
Credits: .5
Prerequisite: TSI complete in Reading and Writing, or equivalent
STC SPCH 1311 Introduction to Speech Communication - This course introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking.

Web Communications — TEA # 03580810 — Course # 0553

Grade Placement: 9-12
Credits: .5
In Web Communications, students will acquire knowledge of web communications and technological operations and concepts. This is an exploratory course in web communications. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

Business, Marketing, and Finance Courses at a Glance

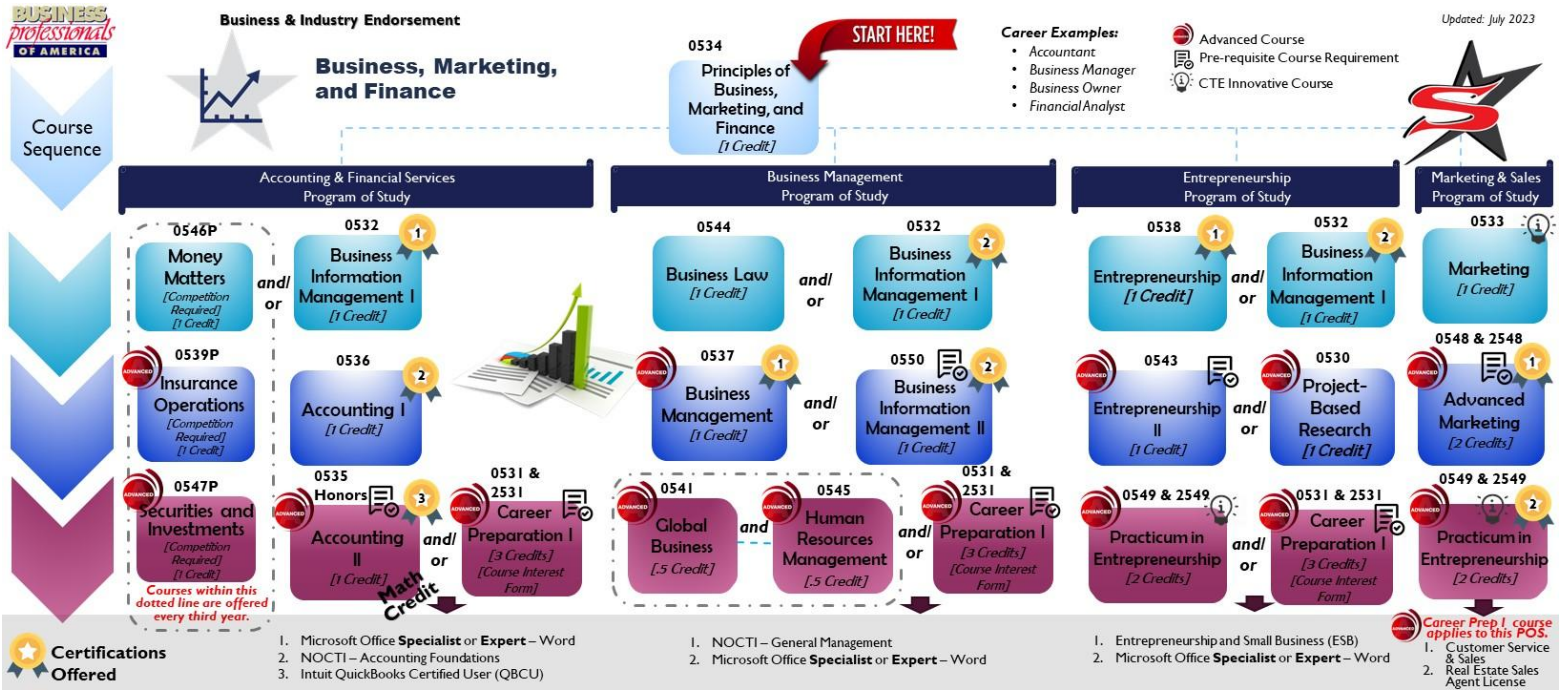
The table that follows is a summary of the career and technical education courses we offer within the Business, Marketing, and Finance career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS OTHER GRAD REQ.
0534	Principles of Business, Marketing, and Finance	1	-	-
0536	Accounting I	1	-	-
0535	Accounting II Honors	1	Yes	Math
0548 & 2548	Advanced Marketing	2	Yes	-
0532	Business Information Management I	1	-	-
0550	Business Information Management II	1	-	-
0544	Business Law	1	-	-
0537	Business Management	1	Yes	-
0538	Entrepreneurship	1	-	-
0543	Entrepreneurship II	1	Yes	-
0541	Global Business	0.5	Yes	-
0545	Human Resources Management	0.5	Yes	-
0539P	Insurance Operations	1	Yes	-
0533	Marketing	1	-	-
0546P	Money Matters	1	-	-
0549 & 2549	Practicum in Entrepreneurship	2	Yes	-

0547P	Securities and Investments	1	Yes	-
0995D	STC Introduction to Computing 1301	1	-	-
0531 & 2531	Career Preparation I	3	Yes	-
0530	Project-Based Research	1	Yes	-

Business, Marketing, and Finance Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Business, Marketing, and Finance career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Business, Marketing, and Finance* course. After this course, students will need to decide which Program of Study (POS) to pursue and then follow the pertinent course sequence. Students are encouraged to select the Program of Study that best matches their college and/or career goals. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



The Texas Education Agency (TEA) engaged members of the workforce, secondary education, and higher education to advise on the development of the Programs of Study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

The next few pages outline the Business, Marketing, and Finance Programs of Study that we offer within our district, which are as follows:

- Accounting & Financial Services
- Business Management
- Entrepreneurship
- Marketing & Sales

Business, Marketing, and Finance Career Cluster

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.

Accounting and Financial Services
Statewide Program of Study

The Accounting and Financial Services program of study teaches CTE learners how to examine, analyze, and interpret financial records. Through this program of study, students will learn the skills necessary to perform financial services, prepare financial statements, interpret accounting records, give advice, or audit and evaluate statements prepared by others. This program of study will also introduce students to mathematical modeling tools.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Business, Marketing, and Finance [1 Credit]
- Money Matters [1 Credit]
- Business Information Management I [1 Credit]

Level 2
- Accounting I [1 Credit]

Level 3
- Accounting II [1 Credit] **(Advanced Course)**
- Insurance Operations [1 Credit] **(Advanced Course)**

Level 4
- Securities and Investments [1 Credit] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Real Estate
- Financial, General
- Financial Planning and Services
- Certified Income Specialist

Bachelor's Degrees
- Accounting
- Financial, General
- Financial Planning and Services
- Certified Income Specialist

Master's, Doctoral, and Professional Degrees
- Financial Accounting
- Business Administration
- Financial Planning

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Business Professionals of America, Future Business Leaders of America, or DECA	• Intern with a local accounting firm • Earn Microsoft Office certifications

Sharyland ISD
Industry-Based Certifications

- Accounting Foundations
- Intuit QuickBooks Certified User

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Accountants and Auditors	$71,469	14,436	22%
Loan Officers	$68,598	2,419	19%
Personal Financial Advisors	$86,965	1,861	52%
Administrative service Managers	$96,138	2,277	21%
Insurance Underwriters	$66,206	594	14%

Successful completion of the Accounting and Financial Services program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

Accounting and Financial Services
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None
Money Matters	13016200 (1 credit)	None	None
Business Information Management I	13011400 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Accounting I	13016600 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Accounting II	13016700 (1 credit)	Accounting I	None
Insurance Operations	13016500 (1 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Securities and Investments	13016400 (1 credit)	None	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Business, Marketing, and Finance Career Cluster

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.

Business Management
Statewide Program of Study

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.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Business, Marketing, and Finance [1 Credit]
- Business Information Management I [1 Credit]

Level 2
- Business Law [1 Credit]
- Business Information Management II [1 Credit]

Level 3
- Business Management [1 Credit] **(Advanced Course)**
- Global Business [.5 Credit] **(Advanced Course)**
- Human Resources Management [.5 Credit] **(Advanced Course)**

Level 4
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Business Administration
- Business/Commerce
- Public Administration
- Business Management

Bachelor's Degrees
- Business Administration
- Business/Commerce
- Public Administration
- Management Science

Master's, Doctoral, and Professional Degrees
- Business Administration
- Business Management
- Public Administration
- Management Science

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Business Professional of America, Future Business Leaders of America, or DECA	• Intern with a local business or chamber of commerce

Sharyland ISD
Industry-Based Certifications

- General Management
- Microsoft Office Specialist: Microsoft Word Expert (Word and Word 2019)

- Microsoft Office Specialist-Word*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Administrative Service Managers	$96,138	2,277	21%
Management Analysts	$87,651	4,706	32%
General and Operations Managers	$107,640	18,679	20%
Supervisors of Administrative Support Works	$57,616	14,982	20%

Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

Business Management
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None
Business Information Management I	13011400 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Business Law	13011700 (1 credit)	None	None
Business Information Management II	13011500 (1 credit)	Business Information Management I	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Business Management	13012100 (1 credit)	None	None
Global Business	13011800 (.5 credit)	None	None
Human Resources Management	13011900 (.5 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Sharyland ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. For inquiries regarding the nondiscrimination policies, contact our Title IX Coordinator at 1200 N. Shary Road, Mission, TX 78572, or by email at deborahgarza@sharylandisd.org and our Section 504 Coordinator at 1200 N. Shary Road, Mission, TX 78572, by email at azucenagarza@sharylandisd.org or by calling (956) 580-5200.

Business, Marketing, and Finance Career Cluster

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.

Entrepreneurship
Statewide Program of Study

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.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Business, Marketing, and Finance [1 Credit]
- Business Information Management I [1 Credit]

Level 2
- Entrepreneurship [1 Credit]

Level 3
- Entrepreneurship II [1 Credit] **(Advanced Course)**

Level 4
- Practicum in Entrepreneurship [2 Credits] **(Advanced Course)**
- Project-Based Research [1 Credit] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Business Administration and Management
- Business/Commerce
- Public Administration
- Business Management

Bachelor's Degrees
- Business Administration and Management
- Business/Commerce
- Public Administration
- Management Science

Master's, Doctoral, and Professional Degrees
- Business Administration and Management
- Business/Commerce
- Public Administration
- Management Science

Work-Based Learning and Expanded-Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Business Professionals of America, Future Leaders of America, or DECA	• Intern with a local management consulting firm

Sharyland ISD
Industry-Based Certifications

- Entrepreneurship and Small Business

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
General and Operations Managers	$107,640	18,679	20%
Management Analysts	$87,651	4,706	32%
Managers, All Others	$113,110	1,794	26%

Successful completion of the Entrepreneurship program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

Entrepreneurship
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None
Business Information Management I	13011400 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Entrepreneurship	13034400 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Entrepreneurship II	N1303423 (1 credit)	Entrepreneurship	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Business Entrepreneurship	N1303425 (2 credits)	None	None
Project-Based Research	12701500 (1 credit)	None	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Business, Marketing, and Finance Career Cluster

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.

Marketing & Sales
Statewide Program of Study

The Marketing and Sales program of study teaches CTE learners how to collect information to determine potential sales of a product or service and/or create a marketing campaign to market or distribute goods and services. Through this program of study, students will learn the skills necessary to understand and apply data on customer demographics, preferences, needs, and buying habits.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Business, Marketing, and Finance [1 Credit]

Level 2
- Marketing [1 credit]

Level 3
- Advanced Marketing [2 Credits] **(Advanced Course)**

Level 4
- Practicum in Entrepreneurship [2 Credits] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Marketing/ Marketing Management, General
- Consumer Merchandising/ Retailing Management
- International Marketing
- Business

Bachelor's Degrees
- Marketing/ Marketing Management, General
- Business Administration
- Applied Economics
- Marketing Research

Master's, Doctoral, and Professional Degrees
- Marketing
- Business Administration
- Applied Economics
- Advertising

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Business Professionals of America, Future Business Leaders of America, or DECA	• Intern with a local marketing firm • Shadow a real estate agent • Operate a school store on campus

Sharyland ISD
Industry-Based Certifications

- Customer Service and Sales: Certified Specialist
- Real Estate Sales Agent License

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Marketing Research Analysts and Marketing Specialists	$70,346	4,664	40%
Insurance Sales Agent	$43,181	5,886	30%
First-Line Supervisors of Retail Sales Workers	$72,550	2,826	15%
Wholesale and Retail Buyers	$51,106	1,229	19%

Successful completion of the Marketing and Sales program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

TEA Texas Education Agency

Marketing & Sales
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Marketing	N1303424 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Advanced Marketing	13034700 (2 credits)	One credit from the courses in the Marketing Career Cluster	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER, PLEASE CONTACT:

Your Junior High or High School Counselor

Business, Marketing, and Finance Certifications

The table below summarizes the CTE certifications that are offered within the Business, Marketing, and Finance career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
NOCTI –Accounting Foundations	*Accounting I*
Intuit QuickBooks Certified User (QBCU)	*Accounting II*
Microsoft Office Specialist or Expert ● Word	*Business Information Management I*
Microsoft Office Specialist or Expert ● Word	*Business Information Management II*
NOCTI – General Management	*Business Management*
Entrepreneurship and Small Business	*Entrepreneurship*
Customer Service & Sales: Certified Specialist	*Advanced Marketing*
Real Estate Sales Agent License	*Practicum in Entrepreneurship*

Business, Marketing, and Finance Course Descriptions

Principles of Business, Marketing and Finance — TEA # 13011200 — Course # 0534

Grade Placement: 9-12
Credit: 1
In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, the marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in business, marketing, and finance.

Accounting I — TEA # 13016600 — Course # 0536

Grade Placement: 10–12
Credit: 1
Recommended Prerequisites: Principles of Business, Marketing, and Finance
In Accounting I, students will investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information. Students will formulate and interpret financial information for use in management decision making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.

Accounting II Honors — TEA # 13016700 — Course # 0535

Grade Placement: 11–12
Credit: 1
Prerequisites: Accounting I
In Accounting II, students will continue the investigation of the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in various managerial, financial, and operational accounting activities. Students will formulate, interpret, and communicate financial information for use in management decision making. Students will use equations, graphical representations, accounting tools, spreadsheet software, and accounting systems in real-world situations to maintain, monitor, control, and plan the use of financial resources.
Note: This course can satisfy a math credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate mathematics course sequence and can apply this course to their math graduation requirements.

Advanced Marketing — TEA # 13034700 — Course # 0548 & 2548

Grade Placement: 11-12
Credit: 2
Prerequisites: Marketing
In Advanced Marketing, students will gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will demonstrate appropriate management and research skills to solve problems related to marketing. This course covers technology, communication, and customer-service skills.

Business Information Management I — TEA # 13011400 — Course # 0532

Grade Placement: 9-12
Credit: 1
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.

Business Information Management II — TEA # 13011500 — Course # 0550

Grade Placement: 11-12
Credit: 1
Prerequisite: Business Information Management I
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.

Business Law — TEA # 13011700 — Course # 0544

Grade Placement: 11-12
Credit: 1
Business Law is designed for students to analyze various aspects of the legal environment, including ethics, the judicial system, contracts, personal property, sales, negotiable instruments, agency and employment, business organization, risk management, and real property.

Business Management — TEA # 13012100 — Course # 0537

Grade Placement: 10-12
Credit: 1
Business Management is designed to familiarize students with the concepts related to business management as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills.

Entrepreneurship — TEA # 13034400 — Course # 0538

Grade Placement: 10–12
Credit: 1
Recommended Prerequisites: Principles of Business, Marketing, and Finance
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.

Entrepreneurship II — TEA # N1303423 — Course # 0543

Grade Placement: 11–12
Credit: 1
Prerequisite: Entrepreneurship
The purpose of the course is to prepare students with the knowledge and skills needed to become a successful entrepreneur within an innovative marketplace. The goal and outcome of the course is for students to have their business launched by the end of the course or have the tools necessary to launch and operate their business. Students are encouraged to 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, develop their brand identity, and participate in local chamber of commerce meetings and events. The recommended participants are students in the CTE Entrepreneurship program of study, students in grades 11-12, and those interested in starting a business.

Global Business — TEA # 13011800 — Course # 0541

Grade Placement: 11-12
Credit: 0.5
Global Business is designed for students to analyze global trade theories, international monetary systems, trade policies, politics, and laws relating to global business as well as cultural issues, logistics, and international human resource management.

Human Resources Management TEA # 13011900 Course # 0545

Grade Placement: 11-12
Credit: 0.5
Human Resources Management is designed to familiarize students with the concepts related to human resource management, including legal requirements, recruitment, and employee selection methods, and employee development and evaluation. Students will also become familiar with compensation and benefits programs as well as workplace safety, employee-management relations, and the impact of global events on human resources management.

Insurance Operations TEA # 13016500 Course # 0539P

Grade Placement: 11-12
Credit: 1
Prerequisite: None
Recommended Prerequisites: Principles of Business, Marketing, and Finance
In Insurance Operations, students will understand the laws and regulations to manage business operations and transactions in the insurance industry.
Note: This course is only offered once every three years and has a competition requirement.

Marketing TEA # N1303424 Course # 0533

Grade Placement: 10-12
Credit: 1
Recommended prerequisite: Principles of Business, Marketing and Finance
Marketing explores the seven core functions of marketing which include: marketing planning – why target market and industry affect businesses; marketing-information management – why market research is important; pricing – how prices maximize profit and affect the perceived value; product/service management – why products live and die; promotion – how to inform customers about products; channel management – how products reach the final user; and selling – how to convince a customer that a product is the best choice. Students will demonstrate knowledge in hands-on projects which may include conducting research, creating a promotional plan, pitching a sales presentation, and introducing an idea for a new product/service.

Money Matters TEA # 13016200 Course # 0546P

Grade Placement: 10-12
Credit: 1
Recommended Prerequisites: Principles of Business, Marketing, and Finance
In Money Matters, students will investigate money management from a personal financial perceptive. Students will apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to establish short-term and long-term financial goals. Students will examine various methods of achieving short-term and long-term financial goals through various methods such as investing, tax planning, asset allocation, risk management, retirement planning, and estate planning.
Note: This course is only offered once every three years and has a competition requirement.

Practicum in Entrepreneurship TEA # N1303425 Course # 0549 & 2549

Grade Placement: 12
Credits: 2
Recommended Prerequisites: Entrepreneurship and Entrepreneurship II

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. Students will prepare for an entrepreneurial career in their area of interest in their career cluster and build on and apply the knowledge and skills gained from courses taken in an array of career areas. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of the student's need for work-based learning experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. It is recommended that students are paired with local business owners or employers in their specific industry program of study.

Securities and Investments TEA # 13016400 Course # 0547P

Grade Placement: 10-12
Credit: 1
Recommended Prerequisites: Principles of Business, Marketing, and Finance
In Securities and Investments, students will understand the laws and regulations to manage business operations and transactions in the securities industry.
Note: This course is only offered once every three years and has a competition requirement.

STC Introduction to Computing Dual Credit TEA # 13011500 Course # 0995D

Grade Placement: 9-12
Credit: 1
Prerequisite: Meet South Texas College acceptance criteria
STC COSC 1301 Introduction to Computing - This is a dual credit course giving students the opportunity to obtain a Business Information Management II high school credit and a South Texas College (STC) COSC 1301 Introduction to Computing college credit. The STC Introduction to Computing course is an overview of computer systems-hardware, operating systems, the internet, and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in Business or Computer Science.

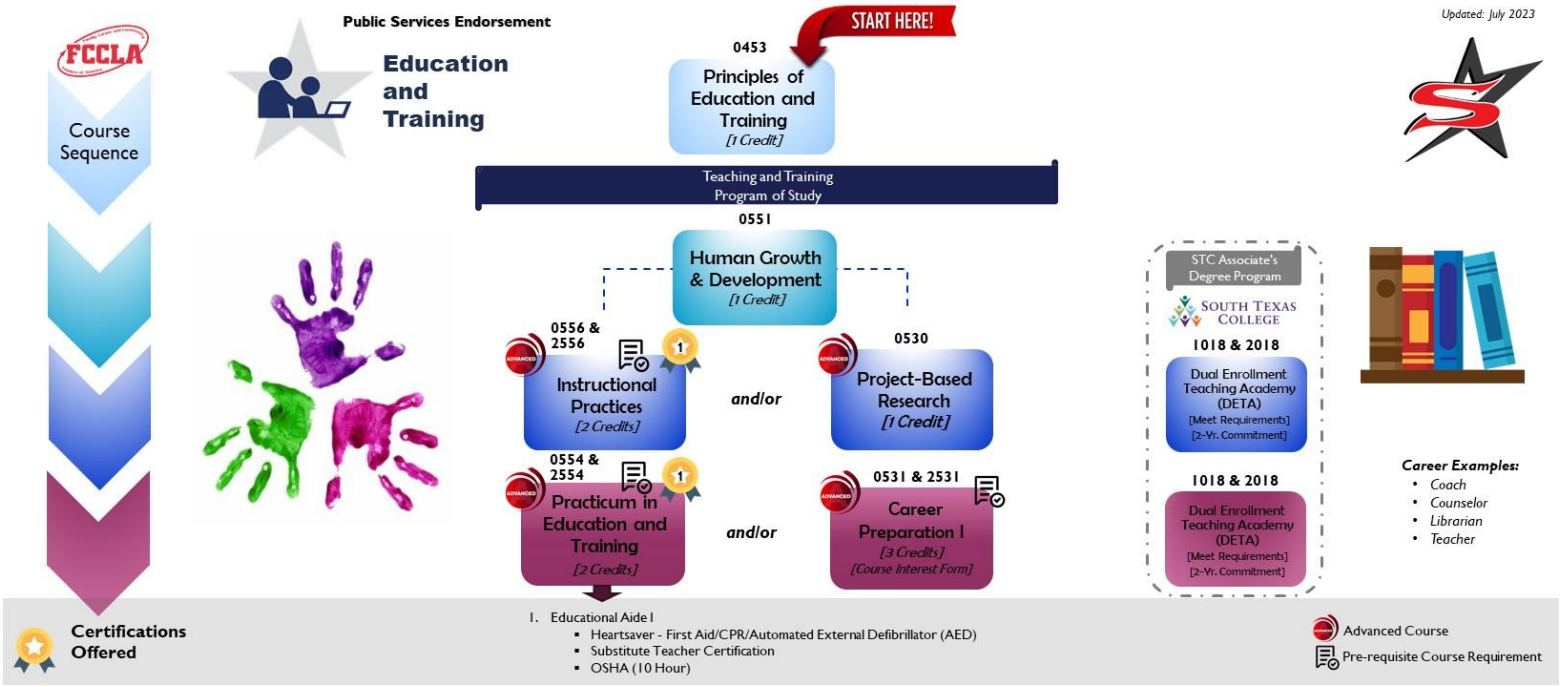
Education & Training Courses at a Glance

The table that follows is a summary of the career and technical education courses we offer within the Education and Training career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS OTHER GRAD REQ.
0453	Principles of Education and Training	1	-	-
0551	Human Growth and Development	1	-	-
0556 & 2556	Instructional Practices	2	Yes	-
0554 & 2554	Practicum in Education and Training	2	Yes	-
1018 & 2018	STC Dual Enrollment Teaching Academy (DETA) - Off-Campus	Various	-	-
0531 & 2531	Career Preparation I	3	Yes	-
0530	Project-Based Research	1	Yes	-

Education & Training Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Education and Training career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Education and Training* course. After this course, students could then proceed to follow the courses that follow. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



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The next few pages outline the Education & Training Program of Study that we offer within our district, which is as follows:

- Teaching & Training

Education and Training Career Cluster

The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services. All parts of courses are designed to introduce learners to the various careers available within the Education and Training career cluster.

Teaching and Training
Statewide Program of Study

The Teaching and Training program of study prepares CTE learners for careers related to teaching, instruction, and creation of instructional and enrichment materials. The program of study introduces CTE learners to a wide variety of student groups and their corresponding needs. It familiarizes them with the processes for developing curriculum, coordinating educational content, and coaching groups and individuals.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Education and Training [1 Credit]

Level 2
- Human Growth and Development [1 Credit]

Level 3
- Instructional Practices [2 Credits] **(Advanced Course)**

Level 4
- Practicum in Education and Training [2 Credits] **(Advanced Course)**
- Project Based Research [1 Credit] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Teacher Education
- Education, General (or specific subject area)
- Special Education
- Health and Physical Education/Fitness

Bachelor's Degrees
- Bilingual and Multilingual Education
- Education, General (or specific subject area)
- Special Education
- Health and Physical Education/Fitness

Master's, Doctoral, and Professional Degrees
- Instruction and Learning
- Educational Leadership and Administration, General
- Special Education
- Social and Philosophical Foundations of Education

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in the Texas Association of Future Educators or Family, Career, and Community Leaders of America	• Teach a community education class • Intern as a teaching assistant or tutor • Serve as a camp counselor

Sharyland ISD
Industry-Based Certifications

- Educational Aide I

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Adult Basic and Secondary Education and Literacy Teachers and Instructors	$48,069	862	17%
Middle School Teachers, Except Special and Career/Technical Education	$54,510	6,407	15%
Career and Technical Education Teachers, Secondary School	$56,360	719	9%
Special Education Teachers, Secondary School	$56,720	980	18%

Successful completion of the Teaching and Training program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022

Teaching and Training
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Education and Training	13014200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Human Growth and Development	13014300 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Instructional Practices	13014400 (2 credits)	1 credit from Education and Training Career Cluster	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Education and Training	13014500 (2 credits)	Instructional Practices	None
Project Based Research	12701500 (1 credit)	None	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE EDUCATION AND TRAINING CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Education & Training Certifications

The table below summarizes the CTE certifications that are offered within the Education & Training career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
Educational Aide I	*Instructional Practices* and *Practicum in Education and Training*
Substitute Teacher Certification (Not on TEA IBC List for Public School Accountability)	Senior-level students in the *Instructional Practices &* *Practicum in Education and Training*
Heartsaver First Aid/CPR/Automated External Defibrillator (AED) (Not on TEA IBC List for Public School Accountability)	*Human Growth and Development*
Occupational Safety and Health Administration (OSHA) 10-Hour (Not on TEA IBC List for Public School Accountability)	*Instructional Practices*

Education & Training Course Descriptions

Principles of Education and Training — TEA # 13014200 — Course # 0453

Grade Placement: 9-12
Credit: 1
Principles of Education and Training is designed to introduce learners to the various careers available within the Education and Training Career Cluster. Students use self- knowledge as well as educational and career information to analyze various careers within the Education and Training Career Cluster. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.

Human Growth and Development — TEA # 13014300 — Course # 0551

Grade Placement: 10-12
Credit: 1
Human Growth and Development is an examination of human development across the lifespan with emphasis on research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.

Instructional Practices — TEA # 13014400 — Course # 0556 & 2556

Grade Placement: 11-12
Credits: 2
Recommended Prerequisite: Principles of Education and Training or Child Development
Instructional Practices is a field-based (practicum) internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.
Note: This course requires a Course Interest Form to be submitted.

Practicum in Education and Training — TEA # 13014500 — Course # 0554 & 2554

Grade Placement: 12
Credits: 2
Prerequisite: Instructional Practices
Recommended Prerequisite: Principles of Education and Training or Child Development
Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.
Note: This course requires a Course Interest Form to be submitted.

STC Dual Enrollment Teaching Academy (DETA) — Course # 1018 & 2018

Grade Placement: 11-12
Credit: 1 per course
Prerequisite: Meet South Texas College acceptance criteria; 2-Year Commitment
The Academy encourages students to consider a Teaching profession by providing college coursework and opportunities that motivate, educate and prepare them for higher education in the field. Students can do this while completing an Associate of Arts in Teaching (AAT) degree by the end of their senior year in high school. *Note: This program has an STC application process in place.*

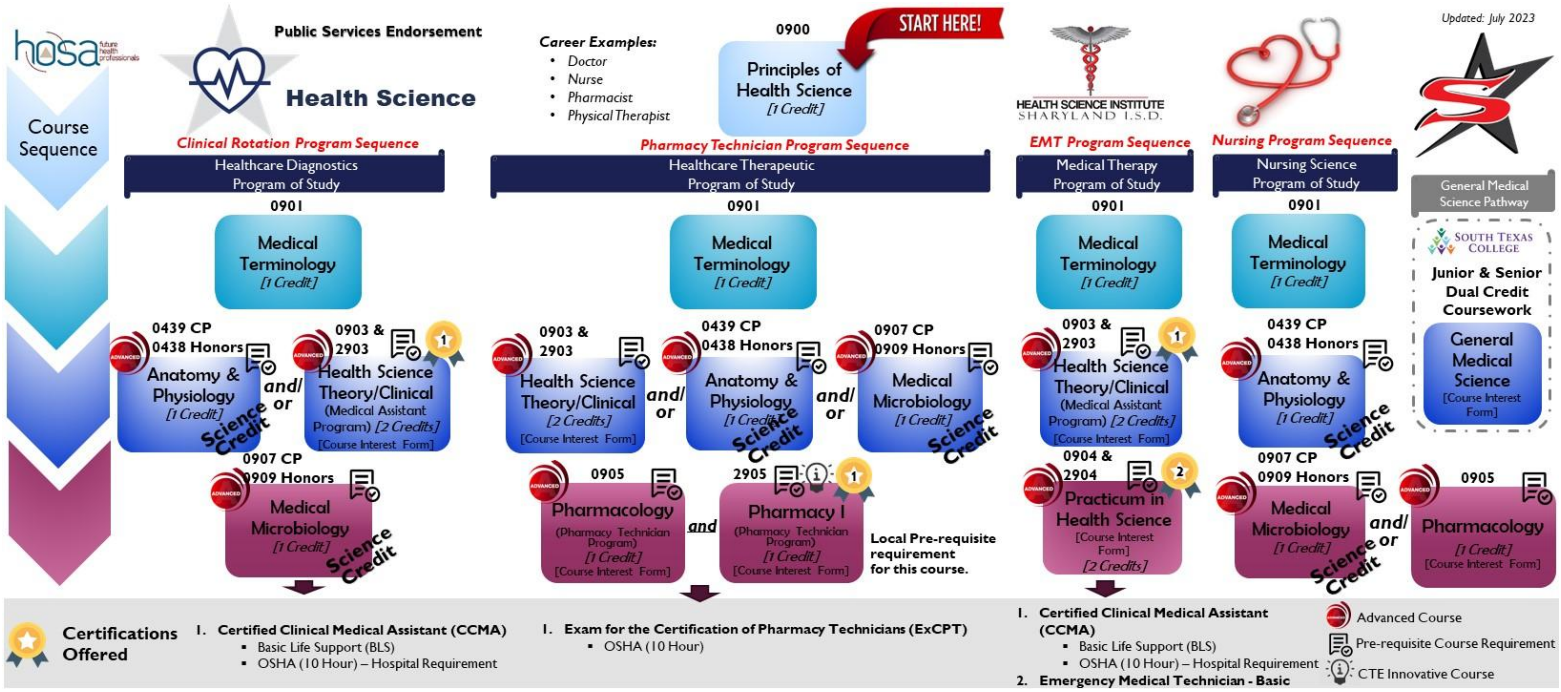
Health Science Courses at a Glance

The table that follows is a summary of the career and technical education courses we offer within the Health Science career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS GRAD REQ.
0900	Principles of Health Science	1	-	-
0439 (CP) 0438 (Honors)	Anatomy and Physiology	1	Yes	Science
0903 & 2903	Health Science Theory/ Health Science Clinical *(Clinical Rotation Program)*	2	Yes	-
0907 (CP) 0909 (Honors)	Medical Microbiology	1	Yes	Science
0901	Medical Terminology	1	-	-
0905	Pharmacology	1	Yes	-
2905	Pharmacy I	1	-	-
0904 & 2904	Practicum in Health Science *(Pharmacy Technician Program)*	2	Yes	-
1008 & 2008	STC Dual Enrollment Medical Science Academy (DEMSA) – Off-Campus	Various	-	-
Various	STC General Medical Science Program	Various	-	-

Health Science Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Health Science career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Health Science* course. After this course, students will need to decide which Program of Study (POS) to pursue and then follow the pertinent course sequence. Students are encouraged to select the Program of Study that best matches their college and/or career goals. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



The Texas Education Agency (TEA) engaged members of the workforce, secondary education, and higher education to advise on the development of the Programs of Study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

The next few pages outline the Health Science Programs of Study that we offer within our district, which is as follows:

- Healthcare Diagnostics
- Healthcare Therapeutic
- Medical Therapy
- Nursing Science

Health Science Career Cluster

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. 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.

Healthcare Diagnostics
Statewide Program of Study

The Healthcare Diagnostics program of study introduces students to occupations and education opportunities related to performing complex medical laboratory tests for the diagnosis, treatment, and prevention of disease. This program of study may also include exploration into the opportunities associated with blood laboratories as well as radiologic technology and ultrasound technology.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Health Science [1 Credit]

Level 2
- Medical Terminology [1 Credit]

Level 3
- Health Science Theory/Health Science Clinical [2 Credits] **(Advanced Course)**
- Anatomy and Physiology [1 Credit] **(Advanced Course)**

Level 4
- Medical Microbiology [1 Credit] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Nuclear Medical Technology/Technologist
- Magnetic Resonance Imaging (MRI) Technology/Technician

Bachelor's Degrees
- Nuclear Medical Technology/Technologist
- Medical Radiologic Technology/Science Radiation Therapist

Master's, Doctoral, and Professional Degrees
- Radiologist
- Radiologic Technology/Science Radiographer

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Health Occupation Students of America	• Perform clinical rotations at a community wellness center, hospital, assisted living, nursing home

Sharyland ISD
Industry-Based Certifications

- Certified Clinical Medical Assistant

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Diagnostic Medical Sonographers	$69,909	495	35%
Phlebotomist	$30,597	1,442	36%
Nuclear Medicine Technologists	$75,962	91	13%
Radiologic Technologists	$55,494	1,196	21%
Magnetic Resonance Imaging Technologists	$68,661	217	21%

Successful completion of the Healthcare Diagnostics program of study will fulfill requirements of the Public Service or STEM endorsement if the math and science requirements are met. Revised – August 2022

Healthcare Diagnostics
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Health Science Theory/Health Science Clinical	13020410 (2 credits)	Biology	None
Anatomy and Physiology	13020600 (1 credit)	Biology and a second science credit	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Health Science Career Cluster

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. 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.

Healthcare Therapeutic
Statewide Program of Study

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.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Health Science [1 Credit]

Level 2
- Medical Terminology [1 Credit]
- Pharmacy I [1 Credit]

Level 3
- Anatomy and Physiology [1 Credit] **(Advanced Course)**
- Health Science Theory/Health Science Clinical [2 Credits] **(Advanced Course)**
- Medical Microbiology [1 Credit] **(Advanced Course)**

Level 4
- Pharmacology [1 Credit] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Dental Hygienist
- Medical/Clinical Assistant

Bachelor's Degrees
- Dental Hygienist

Master's, Doctoral, and Professional Degrees
- Dentist
- Physician Assistant
- Family and General Practitioners
- Pharmacist

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in SkillsUSA or Health Occupation Students of America	• Volunteer at a community wellness center, hospital, assisted living, or nursing home

Sharyland ISD
Industry-Based Certifications

- Pharmacy Technician

Aligned Occupations

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%

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 – March 2023

Healthcare Therapeutic Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None
Pharmacy I	N1302127 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Anatomy and Physiology	13020600 (1 credit)	One credit in Biology, one credit in Chemistry, Integrated Physics and Chemistry, or Physics.	None
Health Science Theory/ Health Science Clinical	13020410 (2 credits)	Biology	None
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Pharmacology	13020950 (1 credit)	Biology and Chemistry	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Health Science Career Cluster

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. 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.

Medical Therapy
Statewide Program of Study

The Medical Therapy program of study focuses on the study of biology and medicine in order to introduce students to the knowledge and skills necessary to be successful in the healthcare field in occupations such as, Respiratory, Occupational, Physical, or Speech Therapy. CTE learners may also practice patient care and communication.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Health Science [1 Credit]

Level 2
- Medical Terminology [1 Credit]

Level 3
- Health Science Theory/Clinical [2 Credits] **(Advanced Course)**

Level 4
- Practicum in Health Science [2 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Occupational Therapy Assistant
- Radiation Therapists
- Respiratory Therapists
- Physical Therapy Assistant

Bachelor's Degrees
- Respiratory Therapists

Master's, Doctoral, and Professional Degrees
- Occupational Therapists
- Speech Language Pathologist
- Physical Therapists

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Health Occupation Students of America	• Intern at a lab • Shadow a therapist • Participate in clinical rotations

Sharyland ISD
Industry-Based Certifications

- Certified Clinical Medical Assistant
- Emergency Medical Technician - Basic

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Speech Language Pathologists	$73,070	1,068	25%
Respiratory Therapists	$57,429	830	20%
Occupational Therapists	$92,227	834	34%
Physical Therapy Assistants	$70,200	1,268	44%

Successful completion of the Medical Therapy program of study will fulfill requirements of a Public Service or STEM endorsement if the math and science requirements are met. Revised – August 2022

Medical Therapy
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Health Science Theory/ Health Science Clinical	13020410 (2 credits)	Biology	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Health Science	13020500 (2 credits)	Health Science Theory and Biology	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Health Science Career Cluster

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. 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.

Nursing Science
Statewide Program of Study

The Nursing Science program of study introduces students to the knowledge and skills related to patient care. CTE learners may learn about or practice caring for patients, routine procedures such as monitoring vital signs, development and implementation of care plans, maintenance of medical records, and disease or pain management. Students may focus on the healthcare system and research system designs and make recommended modifications.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Health Science [1 Credit]

Level 2
- Medical Terminology [1 Credit]

Level 3
- Anatomy and Physiology [1 Credit] **(Advanced Course)**
- Medical Microbiology [1 Credit] **(Advanced Course)**

Level 4
- Pharmacology [1 Credit] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Registered Nursing/Registered Nurse

Bachelor's Degrees
- Informatics Nurse Specialists

Master's, Doctoral, and Professional Degrees
- Nurse Practitioner
- Nursing Administration
- Nurse Anesthetist

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Health Occupation Students of America	• Volunteer at a community wellness center, hospital, assisted living center, or nursing home

Sharyland ISD
Industry-Based Certifications

None

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Licensed Vocational Nurses	$45,178	7,186	21%
Registered Nurses	$68,682	17,493	26%
Nurse Practitioners	$107,827	977	50%
Nurse Anesthetists	$154,856	357	23%

Successful completion of the Nursing Science program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised – March 2023

Nursing Science
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Anatomy and Physiology	13020600 (1 credit)	Biology and a second science credit	None
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Pharmacology	13020950 (1 credit)	Biology and Chemistry	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

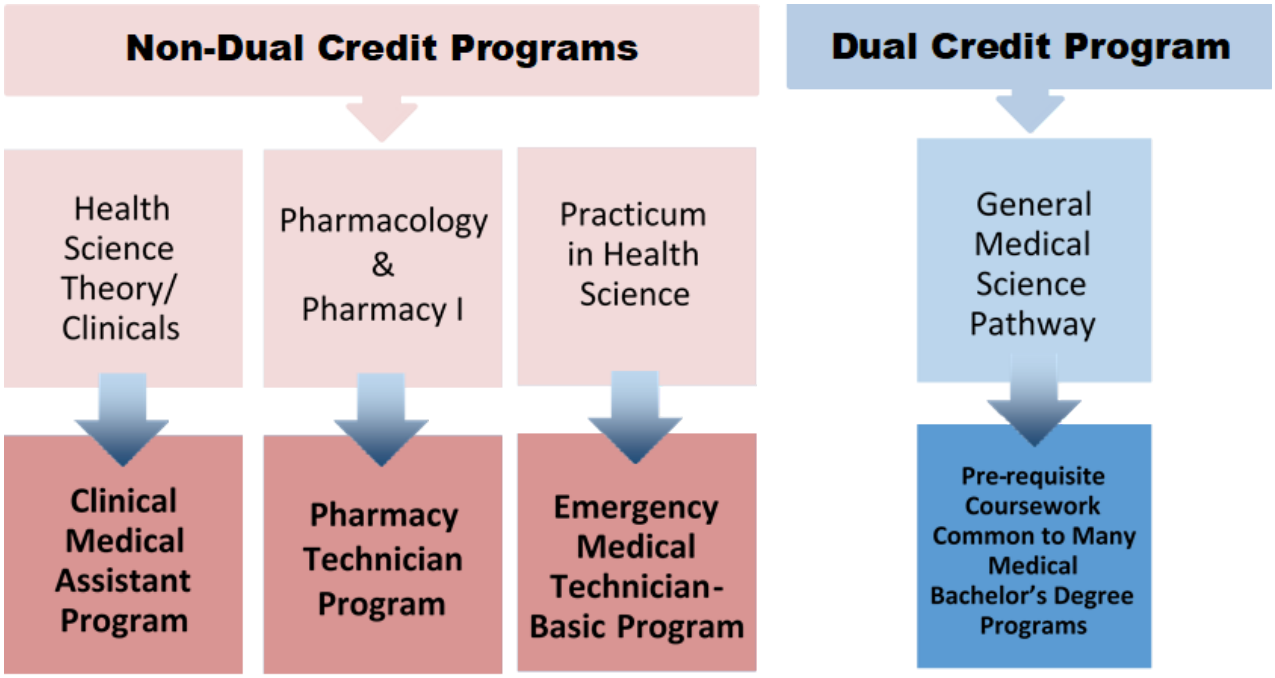
Health Science Institute

HEALTH SCIENCE INSTITUTE
SHARYLAND I.S.D.

Sharyland ISD created a Health Science Institute (HSI) to provide students with the educational foundation to be successful in the healthcare professions. Our HSI consists of various on-campus programs as shown on the graphic below. Through collaboration with community and industry partnerships, students will be provided with work-based learning opportunities in addition to a well-integrated curriculum that provides healthcare certifications and post-secondary educational opportunities. Our post-secondary partner in this initiative is South Texas College.

Before choosing a pathway, students are encouraged to think about the medical program they intend to pursue after high school to determine which pathway will be the best match for them. If students are interested in any one of our non-dual credit HSI programs, they will need to submit a Sharyland ISD Course Interest Form when it becomes available. If students are interested in our dual credit HSI program, they will need to submit a Sharyland ISD Course Interest Form and an STC Dual Enrollment Program Application when they become available. It is important to note that the non-dual credit programs consist of high school credit courses, while our dual credit program consists of dual credit coursework from South Texas College. In order for students and parents to be fully aware of how these college credits will transfer and/or impact college/university grade point averages and financial aid eligibility, students are encouraged to call the post-secondary institution in which they intend to enroll into after high school to find out the specific details. Regardless of course/credit transferability, these pathways were built to provide students with the opportunity to gain certificates, certifications, and/or an early start into a college program that will set the foundation for their ultimate career as a medical professional.

The pathways that we have available as part of our Health Science Institute are as follows. Please note that some of these programs or courses may not be offered in any given year due to low student enrollment.


Non-Dual Credit Programs
Dual Credit Program
Health Science Theory/ Clinicals
Pharmacology & Pharmacy I
Practicum in Health Science
General Medical Science Pathway
Clinical Medical Assistant Program
Pharmacy Technician Program
Emergency Medical Technician-Basic Program
Pre-requisite Coursework Common to Many Medical Bachelor's Degree Programs

Health Science Certifications

The table below summarizes the CTE certifications that are offered within the Health Science career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
Certified Clinical Medical Assistant (CCMA)	*Health Science Theory/Clinical (Medical Assistant Program)*
Exam for the Certification of Pharmacy Technicians (ExCPT)	*Pharmacology & Pharmacy I (Pharmacy Technician Program)*
Emergency Medical Technician – Basic	*Practicum in Health Science (EMT Program)*
Basic Life Support (BLS) includes CPR and AED (Not on TEA IBC List for Public School Accountability)	*Health Science Theory (Medical Assistant Program)*
Occupational Safety and Health Administration (OSHA) 10-Hour (Not on TEA IBC List for Public School Accountability)	*Health Science Theory (Medical Assistant Program),* *and* *Pharmacology & Pharmacy I (Pharmacy Technician Program)*

Health Science Course Descriptions

Principles of Health Science | TEA # 13020200 | Course # 0900

Grade Placement: 9-12
Credit: 1
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.

Anatomy and Physiology | TEA # 13020600 | Course # 0439

Grade Placement: 11-12
Credit: 1
Prerequisite: Biology and a second science credit
Recommended Prerequisite: A course from the Health and Science Career Cluster
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.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Anatomy and Physiology Honors | TEA # 13020600 | Course # 0438

Grade Placement: 11-12
Credit: 1
Prerequisite: Biology and a second science credit
Recommended Prerequisite: A course from the Health and Science Career Cluster
Anatomy and Physiology is a course 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. This course is similar to Anatomy and Physiology; however, it incorporates higher-order thinking skills through assessment and synthesis of the anatomical knowledge combined with exposure to clinical analysis and lab work. 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.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Health Science Theory/Health Science Clinical | TEA # 13020410 | Course # 0903 & 2903

Grade Placement: 11-12
Credits: 2
Local Prerequisites: Biology; Principles of Health Science; and Medical Terminology
Corequisite: Health Science Theory
The Health Science Clinical course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development. Districts are encouraged to offer this course in a consecutive block with Health Science Theory to allow students sufficient time to master the content of both courses.
Note: This course requires a Course Interest Form to be submitted.

Medical Microbiology — TEA # 13020700 — Course # 0907

Grade Placement: 11-12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisites: A course from the Health Science Career Cluster
The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Medical Microbiology Honors — TEA # 13020700 — Course # 0909

Grade Placement: 11-12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisites: A course from the Health Science Career Cluster
The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. This course is similar to Medical Microbiology; however, it incorporates higher-order thinking skills through assessment and synthesis of the presented knowledge combined with exposure to clinical analysis and lab work. Students must meet the 40% laboratory and fieldwork requirement.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Medical Terminology — TEA # 13020300 — Course # 0901

Grade Placement: 10-12
Credit: 1
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.

Pharmacology — TEA # 13020950 — Course # 0905

Grade Placement: 12
Credit: 1
Local Prerequisites: Biology; Chemistry; Algebra II; Principles of Health Science, and Medical Terminology
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.
Note: This course requires a Course Interest Form to be submitted.

Pharmacy I — TEA # N1302127 — Course # 2905

Grade Placement: 12
Credit: 1
Local Prerequisites: Biology; Chemistry; Algebra II; Principles of Health Science, and Medical Terminology; and Pharmacology
In Pharmacy I students build on their existing foundation of knowledge and skills needed to pursue a career in the pharmaceutical field such as a pharmacy technician or pharmacist). Instruction includes pharmacokinetics, pharmacy law, medication safety, the dispensing process, and inventory. This course is aligned with the standards of the national certification

exams that students might take, such as Pharmacy Technician Certification Examination (PTCE) and/or Exam for the Certification of Pharmacy Technicians (ExCPT). Recommended participants are students who wish to become certified pharmacy technicians. *Note: This course requires a Course Interest Form to be submitted.*

Practicum in Health Science Emergency Medical Technician (EMT) Program — TEA # 13020500 — Course # 0904 & 2904

Grade Placement: 12
Credits: 2
Local Prerequisites: Biology; Principles of Health Science; Medical Terminology; Health Science Theory/Clinical
Recommended Prerequisite: Anatomy & Physiology
This course is designed to equip students with knowledge, technical skills, and work habits required for an entry-level Emergency Medical Technician (EMT). This course encourages active student participation and may include group discussions and projects, laboratory work, simulations, demonstrations, field trips, guest speakers, and lectures. A strong emphasis is placed on ethics, accountability, professionalism, and the individual's commitment to pursue lifelong personal and professional development.
Note: This course requires a Course Interest Form to be submitted.

STC Dual Enrollment Medical Science Academy (DEMSA) — Course # 1008 & 2008

Grade Placement: 11-12
Credit: 1 per course
Prerequisite: Meet South Texas College acceptance criteria; 2-Year Commitment
This South Texas College (STC) Dual Enrollment Medical Science Academy (DEMSA) is a two year-round dual enrollment program developed for high school juniors and seniors who are seriously interested in pursuing a career in health care. The purpose of this academy is to increase the number of rural area students committed to careers and service in Medicine, Pharmacy Dentistry, Nursing, Allied Health, and others. This academy is designed to encourage area high school students into the health care professions by providing college coursework and health related opportunities that will motivate, educate, and prepare students for higher education in the field of medicine. With the support of the local health providers, the Dual Enrollment Medical Science Academy will promote and participate in efforts that will reinforce the schools' and communities' commitment to prepare students for careers in health care. Contact your school Counselor for more information on how to enroll into this program.
Note: This program has an STC application process in place.

South Texas College General Medical Science Pathway — Course # Various

Grade Placement: 10-12
Credits: Various
Prerequisite: Meet South Texas College acceptance criteria
Loca Prerequisites: Biology; Principles of Health Science; and Medical Terminology
This pathway enables students to take general prerequisite coursework that is common to many medical degree programs. Students are encouraged to investigate what exact coursework comprises the bachelor's degree program they intend to pursue after high school to ensure that the prerequisite coursework they take as part of this pathway will be applicable. Students are also encouraged to call the post-secondary college or university they intend to enroll into after high school to find out whether the courses they are planning to take as part of this track will be able to transfer into their desired degree program. Contact your school Counselor for more information on how to enroll into this pathway.
Note: This program has an STC application process in place.

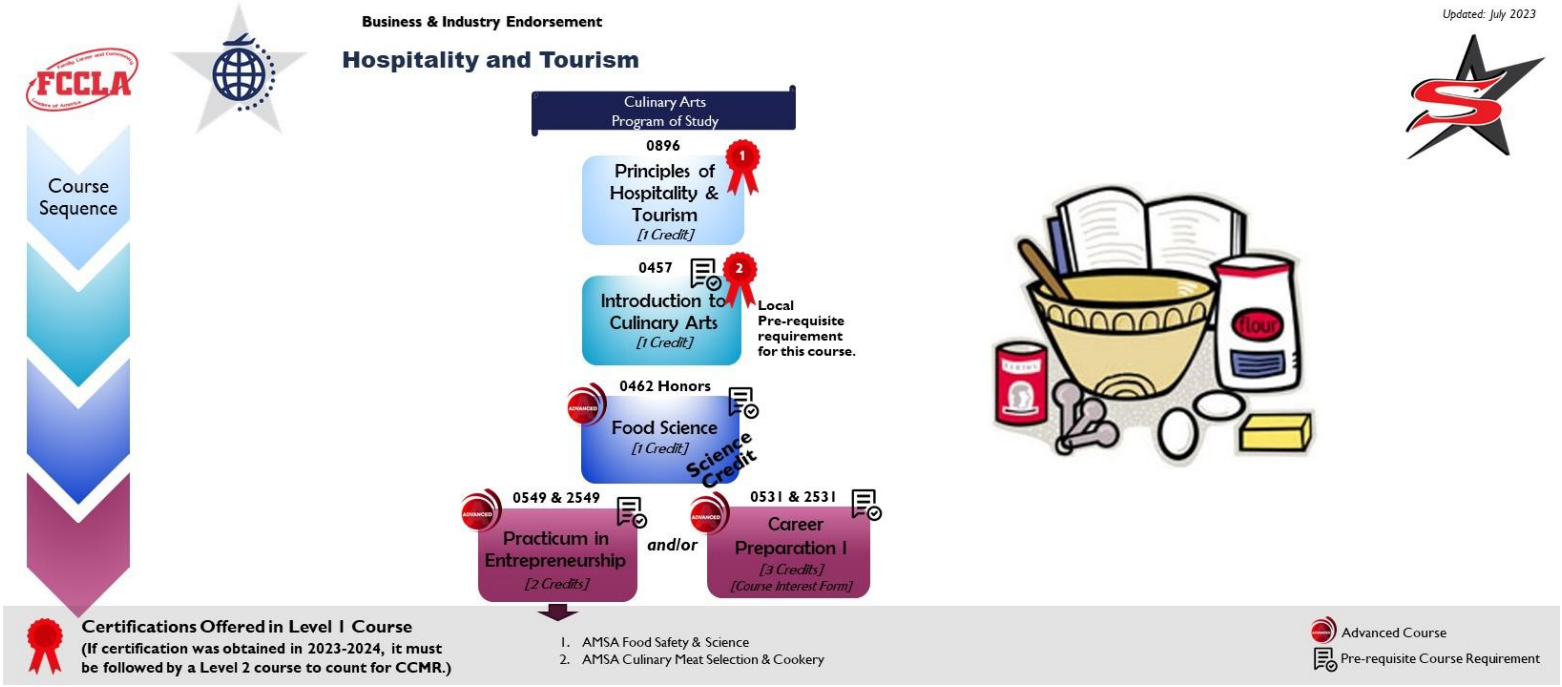
Hospitality & Tourism Courses at a Glance

The table that follows is a summary of the career and technical education courses we offer within the Hospitality & Tourism career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS GRAD REQ.
0896	Principles of Hospitality & Tourism	1	-	-
0457	Introduction to Culinary Arts	1	-	-
0462 (Honors)	Food Science	1	Yes	Science
0549 & 2549	Practicum in Entrepreneurship (Business, Marketing, and Finance Course)	2	Yes	-
0531 & 2531	Career Preparation I	3	Yes	-

Hospitality & Tourism Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Hospitality and Tourism career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Hospitality and Tourism* course. After this course, students will need to decide which Program of Study (POS) to pursue and then follow the pertinent course sequence. Students are encouraged to select the Program of Study that best matches their college and/or career goals. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



The Texas Education Agency (TEA) engaged members of the workforce, secondary education, and higher education to advise on the development of the Programs of Study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

The next few pages outlines the Hospitality & Tourism Programs of Study that we offer within our district, which is as follows:

- Culinary Arts

Hospitality and Tourism Career Cluster

The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services. Students acquire knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success.

Culinary Arts
Statewide Program of Study

The Culinary Arts program of study introduces CTE learners to occupations and educational opportunities related to the planning, directing, or coordinating activities of a food and beverage organization or department. This program of study also explores opportunities involved in directing and participating in the preparation and cooking of food.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Hospitality and Tourism [1 Credit]
- Introduction to Culinary Arts [1 Credit]

Level 2
- None

Level 3
- Food Science [1 Credit] **(Advanced Course)**

Level 4
- Practicum in Entrepreneurship [2 Credits] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Hotel and Restaurant Management
- Restaurant Culinary and Catering Management
- Hospitality Administration/ Management, General
- Culinary Arts/ Chef Training

Bachelor's Degrees
- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Culinary Science and Food Service Management

Master's, Doctoral, and Professional Degrees
- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Business Administration Management, General

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Family, Career, and Community Leaders of America, SkillsUSA, American Culinary Federation, or the Texas Restaurant Association	• Plan a catering event or work for a catering company • Participate in a cooking course • Work in a restaurant

Sharyland ISD
Industry-Based Certifications

- Culinary Meat Selection & Cookery Certification
- Food Safety & Science Certification

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Food and Beverage Managers	$55,619	1,561	28%
Chef and Head Cooks	$43,285	1,366	25%
Food Science Technicians	$34,382	236	11%

Successful completion of the Culinary Arts program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022

Culinary Arts
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Hospitality and Tourism	13022200 (1 credit)	None	None
Introduction to Culinary Arts	13022550 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Food Science	13023000 (1 credit)	3 units of Science, including Chemistry and Biology	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE HOSPITALITY AND TOURISM CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Hospitality & Tourism Certifications

The table below summarizes the CTE certifications that are offered within the Hospitality & Tourism career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
American Meat Science Association (AMSA) Food Safety & Science Certification	*Principles of Hospitality & Tourism*
American Meat Science Association (AMSA) Culinary Meat Selection & Cookery	*Introduction to Culinary Arts*

Hospitality & Tourism Course Descriptions

Principles of Hospitality & Tourism — TEA # 13022200 — Course # 0896

Grade Placement: 9-12
Credit: 1
Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.

Introduction to Culinary Arts — TEA # 13022550 — Course # 0457

Grade Placement: 10–12
Credits: 1
Local Prerequisite: Principles of Hospitality and Tourism
Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry level course for students interested in pursuing a career in the food service industry. This course is offered as a classroom and laboratory-based course.

Food Science Honors — TEA # 13023000 — Course # 0462

Grade Placement: 12
Credit: 1
Prerequisites: Three units of science, including Chemistry and Biology
Local Prerequisite: Principles of Hospitality and Tourism; and Introduction to Culinary Arts
In Food Science students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Food Science is the study of the nature of foods, the causes of deterioration in food products, the principles underlying food processing, and the improvement of foods for the consuming public.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

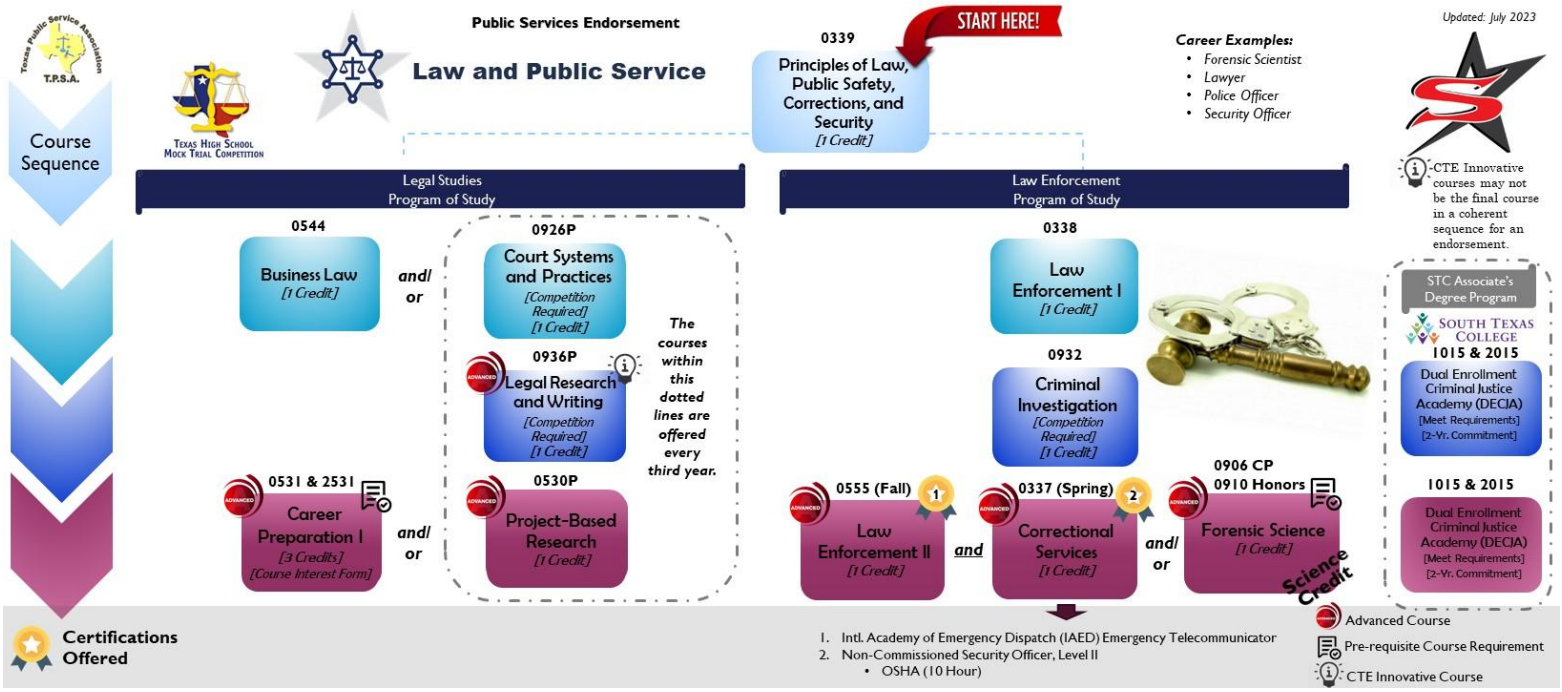
Law, Public Safety, Corrections, and Security Courses at a Glance

The table that follows is a summary of the career and technical education courses we offer within the Law, Public Safety, Corrections, and Security career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS GRAD REQ.
0339	Principles of Law, Public Safety, Corrections, and Security	1	-	-
0337	Correctional Services	1	Yes	-
0926P	Court Systems and Practices	1	-	-
0932	Criminal Investigation	1	-	-
0906 (CP) 0910 (Honors)	Forensic Science	1	Yes	Science
0338	Law Enforcement I	1	-	-
0555	Law Enforcement II	1	Yes	-
0936P	Legal Research and Writing	1	Yes	-
1015 & 2015	STC Dual Enrollment Criminal Justice Academy (DECJA)	Various	-	-
0544	Business Law (Business, Marketing, and Finance Course)	1	-	-
0531 & 2531	Career Preparation I (Career Development Course)	3	Yes	-
0530P	Project-Based Research (Career Development Course)	1	Yes	-

Law, Public Safety, Corrections, and Security Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Law and Public Service career cluster. If students are interested in this career cluster, it is important that they begin their coursework with the *Principles of Law, Public Safety, Corrections, and Security* course. After this course, students will need to decide which Program of Study (POS) to pursue and then follow the pertinent course sequence. Students are encouraged to select the Program of Study that best matches their college and/or career goals. Students are also encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



The Texas Education Agency (TEA) engaged members of the workforce, secondary education, and higher education to advise on the development of the Programs of Study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

The next few pages outline the Law, Public Safety, Corrections, and Security Programs of Study that we offer within our district, which are as follows:

- Legal Studies
- Law Enforcement

Law and Public Service Career Cluster

The Law and Public Service Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and fire and emergency services.

Legal Studies
Statewide Program of Study

The Legal Studies program of study introduces CTE learners to the occupations and educational opportunities related to representing clients in criminal and civil litigation and other legal proceedings, as well as assisting lawyers and preparing legal documents. This program of study explores possible specializations in a single area of law.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Law, Public Safety, Corrections, and Security [1 Credit]

Level 2
- Court Systems and Practices [1 Credit]
- Business Law [1 Credit]

Level 3
- Legal Research and Writing [1 Credit] **(Advanced Course)**

Level 4
- Project-Based Research [1 Credit] **(Advanced Course)**
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Legal Assistant/Paralegal

Bachelor's Degrees
- Legal Assistant/Paralegal

Master's, Doctoral, and Professional Degrees
- Law
- Intellectual Property Law
- Advanced Legal Research/Studies General
- International Law and Legal Studies

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Attend court hearings and other legal procedures • Join the Texas Public Service Association	• Intern with a local attorney • Script and conduct a mock trial

Sharyland ISD
Industry-Based Certifications

None

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Lawyers	$126,131	2,801	19%
Paralegal and Legal Assistants	$50,544	2,837	19%

Successful completion of the Legal Studies program of study will fulfill requirements of the Public Service endorsement.
Revised – March 2023

Legal Studies
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Court Systems and Practices	13029600 (1 credit)	None	None
Business Law	13011700 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Legal Research and Writing	N1303014 (1 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Project-Based Research	12701500 (1 credit)	None	None
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Law and Public Service Career Cluster

The Law and Public Service Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and fire and emergency services.

Law Enforcement
Statewide Program of Study

The Law Enforcement program of study teaches CTE learners about the development of, adherence to, and protection of various branches of law. Students will learn how to appropriately and legally respond to breaches in the law according to statutory rules and regulations as well as investigate how and why the breaches occurred.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Law, Public Safety, Corrections, and Security [1 Credit]

Level 2
- Law Enforcement I [1 Credit]
- Criminal Investigation [1 Credit]

Level 3
- Law Enforcement II [1 Credit] **(Advanced Course)**
- Correctional Services [1 Credit] **(Advanced Course)**

Level 4
- Forensic Science [1 Credit] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Criminal Justice/Safety Studies/Law Enforcement Administration
- Criminal Justice/Police Science
- Corrections
- Criminalistics and Criminal Science

Bachelor's Degrees
- Criminal Justice/Safety Studies/Law Enforcement Administration
- Criminal Justice/Police Science
- Juvenile Corrections
- Cyber/Computer Forensics and Counterterrorism

Master's, Doctoral, and Professional Degrees
- Criminal Justice/Safety Studies/Law Enforcement Administration
- Natural Resources
- Law Enforcement and Protective Services

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join the Texas Public Service Association or local criminal justice clubs	• Attend court hearings and other legal procedures

Sharyland ISD
Industry-Based Certifications

- Non-Commissioned Security Officer Level II License
- IAED Emergency Telecommunicator

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Police and Sheriff's Patrol Officers	$60,112	5,241	13%
Probation Officers and Correctional Treatment Officers	$44,054	793	9%
Correctional Officers and Jailers	$40,186	4,683	9%
Immigration and Customs Inspectors	$78,104	1,236	9%
First-Line Supervisors of Police and Detectives	$91,312	253	25%

Successful completion of the Law and Public Service program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022

Law Enforcement
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Law Enforcement I	13029300 (1 credit)	None	None
Criminal Investigation	13029550 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Law Enforcement II	13029400 (1 credit)	None	None
Correctional Services	13029700 (1 credit)	None	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Forensic Science	13029500 (1 credit)	Biology and Chemistry	None

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Law, Public Safety, Corrections and Security Certifications

The table below summarizes the CTE certifications that are offered within the Law, Public Safety, Corrections, and Security career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
International Academy of Emergency Dispatch (IAED) Emergency Telecommunicator	*Law Enforcement II*
Non-Commissioned Security Officer Level II	*Correctional Services*
Occupational Safety and Health Administration (OSHA) 10-Hour (Not on TEA IBC List for Public School Accountability)	*Correctional Services*

Law, Public Safety, Corrections, and Security Course Descriptions

Principles of Law, Public Safety, Corrections and Security TEA # 13029200 Course # 0339

Grade Placement: 9-12
Credit: 1
Principles of Law, Public Safety, Corrections, and Security introduces students to professions in law enforcement, protective services, corrections, firefighting, and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, protective services, and corrections.

Business Law TEA # 13011700 Course # 0544

Grade Placement: 10-12
Credit: 1
Business Law is designed for students to analyze various aspects of the legal environment, including ethics, the judicial system, contracts, personal property, sales, negotiable instruments, agency and employment, business organization, risk management, and real property.
This course is a part of the Business, Marketing, and Finance career cluster.

Correctional Services TEA # 13029700 Course # 0337

Grade Placement: 12
Credit: 1
Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security
In Correctional Services, students prepare for certification required for employment as a municipal, county, state, or federal correctional officer. Students will learn the role and responsibilities of a county or municipal correctional officer; discuss relevant rules, regulations, and laws of municipal, county, state, or federal facilities; and discuss defensive tactics, restraint techniques, and first aid procedures as used in the municipal, county, state, or federal correctional setting. Students will analyze rehabilitation and alternatives to institutionalization for inmates.
This course is paired with Law Enforcement II.

Court Systems and Practices TEA # 13029600 Course # 0926P

Grade Placement: 10–12
Credit: 1
Recommended Prerequisite: Law Enforcement I
Court Systems and Practices is an overview of the federal and state court systems. The course identifies the roles of judicial officers and the trial processes from pretrial to sentencing and examines the types and rules of evidence. Emphasis is placed on constitutional laws for criminal procedures such as search and seizure, stop and frisk, and interrogation.
Note: This course is only offered once every three years and has a competition requirement.

Criminal Investigation TEA # 13029550 Course # 0932

Grade Placement: 11–12
Credit: 1
Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security
Criminal Investigation is a course that introduces students to the profession of criminal investigations. Students will understand basic functions of criminal investigations and procedures and will learn how to investigate or follow up during investigations. Students will learn terminology and investigative procedures related to criminal investigation, crime scene processing, evidence collection, fingerprinting, and courtroom presentation. Through case studies and simulated crime scenes, students will collect and analyze evidence such as fingerprint analysis, bodily fluids, hairs, fibers, shoe and tire

impressions, bite marks, drugs, tool marks, firearms and ammunition, blood spatter, digital evidence, and other types of evidence.

Forensic Science — TEA # 13029500 — Course # 0906

Grade Placement: 11–12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections & Safety Career Cluster course
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. Scientific methods of investigation can be experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Forensic Science Honors — TEA # 13029500 — Course # 0910

Grade Placement: 11–12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections & Safety Career Cluster course
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 with the use of higher order thinking skills and strategies. 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. Scientific methods of investigation can be experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked. Students are expected to work collaboratively as well as individually to reach specific course requirements.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Law Enforcement I — TEA # 13029300 — Course # 0338

Grade Placement: 10–12
Credit: 1
Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security
Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

Law Enforcement II — TEA # 13029400 — Course # 0555

Grade Placement: 12
Credit: 1
Recommended Prerequisite: Law Enforcement I
Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. Students will understand ethical and legal responsibilities, patrol procedures, first responder roles, telecommunications, emergency equipment operations, and courtroom testimony.
This course is paired with Correctional Services.

Legal Research and Writing — TEA # N13003014 — Course # 0936P

Grade Placement: 10–12
Credit: 1
Recommended Prerequisite: Court Systems and Practices
Legal Research and Writing provides an introduction into the study and practice of legal writing and research. This course is designed to introduce students to the methods and tools used to conduct legal research, develop and frame legal arguments, produce legal writings such as briefs, memorandums, and other legal documents, study U.S. Constitutional law, and prepare for appellate argument(s).
Note: This course is only offered once every three years and has a competition requirement.

STC Dual Enrollment Criminal Justice Academy (DECJA) — Course # 1015 & 2015

Grade Placement: 11-12
Credit: 1 per course
Prerequisite: Meet South Texas College acceptance criteria; 2-Year Commitment
This South Texas College (STC) Dual Enrollment Criminal Justice Academy (DECJA) is a two year-round dual enrollment program developed for high school juniors and seniors who are seriously interested in pursuing a career in criminal justice. This academy is designed to encourage area high school students into the criminal justice professions by providing college course-work and opportunities that will motivate, educate, and prepare students for higher education in the field of criminal justice. With the support of the local law enforcement professionals, the Dual Enrollment Criminal Justice Academy will promote and participate in efforts that will reinforce the schools' and communities' commitment to prepare students for careers in criminal justice. Contact your school Counselor for more information on how to enroll into this program.
Note: This course has an application process in place.

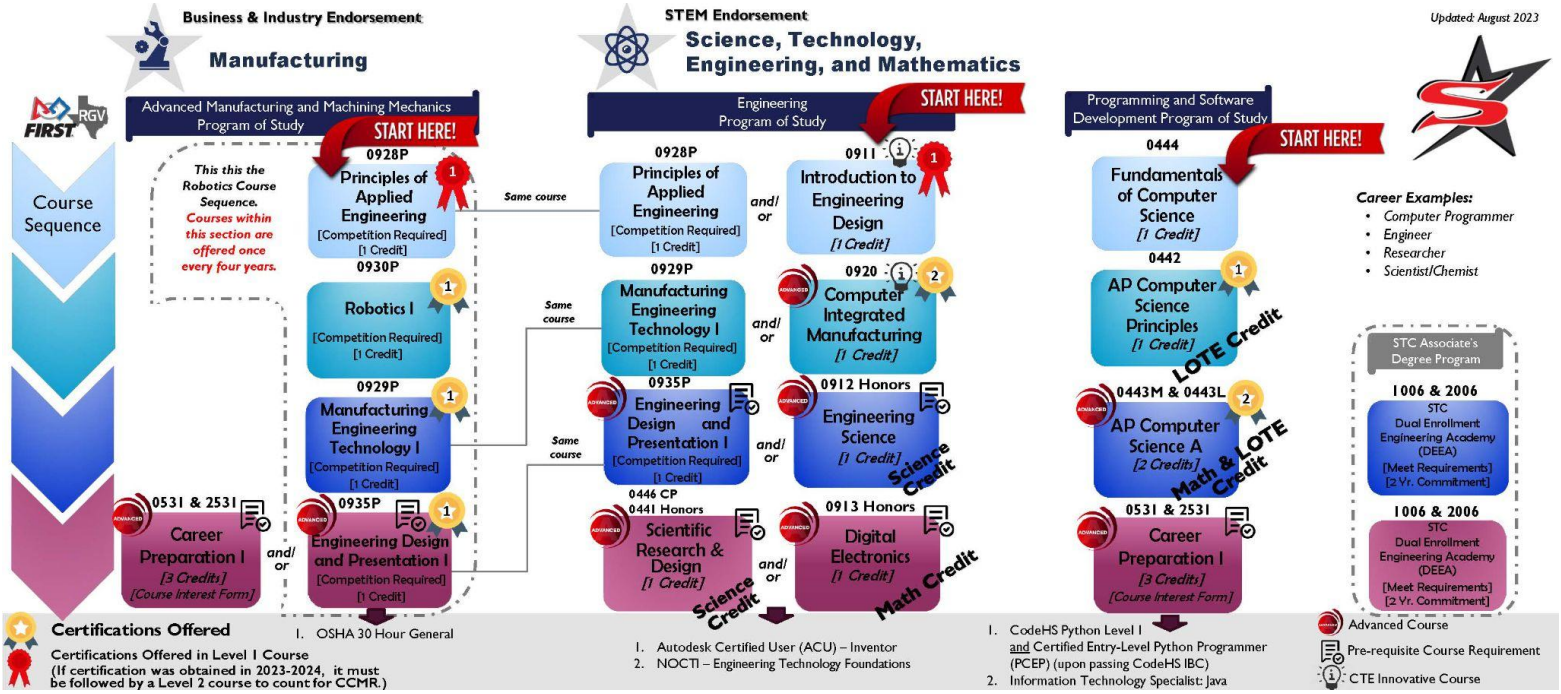
Science, Technology, Engineering & Mathematics (STEM) Courses at a Glance

The table that follows is a summary of the career and technical education courses we offer within the Science, Technology, Engineering and Mathematics (STEM) career cluster.

LOCAL COURSE #	COURSE NAME	CREDIT	ADVANCED COURSE	MEETS GRAD REQ.
0442	AP Computer Science Principles	1	-	LOTE
0443M & 0443L	AP Computer Science A	1	Yes	Math & LOTE
0920	Computer Integrated Manufacturing	1	Yes	-
0913 (Honors)	Digital Electronics *(PLTW Engineering Program Course)*	1	Yes	Math
0935P	Engineering Design and Presentation I	1	Yes	-
0912 (Honors)	Engineering Science *(PLTW Engineering Program Course)*	1	Yes	Science
0444	Fundamentals of Computer Science	1	-	-
0911	Introduction to Engineering Design *(PLTW Engineering Program Course)*	1	-	-
0929P	Manufacturing Engineering Technology I	1	-	-
0928P	Principles of Applied Engineering	1	-	-
0930P	Robotics I	1	-	-
0446 (CP) 0441 (Honors)	Scientific Research and Design	1	Yes	Science
1006 & 2006	STC Dual Enrollment Engineering Academy (DEEA)	Various	-	-
0531 & 2531	Career Preparation I	3	Yes	-

Science, Technology, Engineering & Mathematics (STEM) Career Cluster Flowchart

The flowchart that follows depicts the Career and Technical Education (CTE) courses we offer within the Manufacturing and Science, Technology, Engineering, and Mathematics career clusters. If students are interested in one of these career clusters, it is important that they review the three available Programs of Study, and select the one that best matches their college and/or career goals. After the first course, students will need to decide whether they are interested in continuing. If so, the student is encouraged to become a Program of Study completer by obtaining three or more courses for four or more credits within their selected POS, including one advanced-level course. The advanced-level courses are identified by a red circle on the top-left corner of each course. It is also important to note that some courses may have a specific prerequisite course requirement, which can be seen in the Course Descriptions section below. Some courses offer an industry-based certification (IBC), which can be seen by a ribbon on the top right hand corner of course. The name(s) of the IBC(s) offered within each course are listed on the bottom of the flowchart under each respective Program of Study.



The Texas Education Agency (TEA) engaged members of the workforce, secondary education, and higher education to advise on the development of the Programs of Study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

Please note that the Robotics Pathway is not a state-approved Program of Study and is merely a locally-developed sequence of courses. The next few pages outline the Science, Technology, Engineering, and Mathematics Programs of Study that we offer within our district, which are as follows:

- Engineering
- Programming and Software Development
- Advanced Manufacturing and Machining Mechanics (Manufacturing Career Cluster POS)

Manufacturing Career Cluster

The Manufacturing Career Cluster focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Advanced Manufacturing and Machinery Mechanics

Statewide Program of Study

The Advanced Manufacturing and Machinery Mechanics program of study focuses on the assembly, operation, maintenance, and repair of electromechanical equipment or devices. CTE learners may work in a variety of mechanical fields, gaining knowledge and experience in robotics, refinery and pipeline systems, deep ocean exploration, or hazardous waste removal. CTE concentrators may work in a variety of fields of engineering.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Applied Engineering [1 Credit]

Level 2
- Robotics I [1 Credit]
- Manufacturing Engineering Technology I [1 Credit]

Level 3
- Engineering Design and Presentation I [1 Credit] **(Advanced Course)**

Level 4
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Electromechanical Engineering/Technology
- Certified Quality Technician
- Industrial Mechanics and Maintenance Technology

Bachelor's Degrees
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

Master's, Doctoral, and Professional Degrees
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in SkillsUSA and local STEM events	• Work at a local business or industry apprenticeship • Join the American Welding Society

Sharyland ISD
Industry-Based Certifications

- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Electro-Mechanical Assemblers	$30,160	951	9%
Electro-Mechanical Technicians	$56,555	127	9%
Industrial Machinery Mechanics	$49,816	3,788	27%

Successful completion of the Advanced Manufacturing and Machinery Mechanics program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met.
Revised – August 2022

Advanced Manufacturing and Machinery Mechanics Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Applied Engineering	13036200 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Robotics I	13037000 (1 credit)	None	None
Manufacturing Engineering Technology I	13032900 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Engineering Design and Presentation I	13036500 (1 credit)	Algebra I	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE MANUFACTURING CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Science, Technology, Engineering, and Mathematics Career Cluster

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.

Engineering
Statewide Program of Study

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.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Principles of Applied Engineering [1 Credit]
- Introduction to Engineering Design (PLTW) [1 Credit]

Level 2
- Manufacturing Engineering Technology I [1 Credit]

Level 3
- Engineering Design and Presentation I [1 Credit] **(Advanced Course)**
- Computer Integrated Manufacturing (PLTW) [1 Credit] **(Adv. Course)**
- Digital Electronics [1 Credit] **(Advanced Course)**
- Engineering Science [1 Credit] **(Advanced Course)**

Level 4
- Scientific Research and Design [1 Credit] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Electrical and Electronics Engineering
- Drafting and Design Technology/ Technician, General
- Engineering Technology

Bachelor's Degrees
- Electrical and Electronics Engineering
- CAD/CADD Drafting and/or Design Technology/ Technician
- Bioengineering and Biomedical Engineering
- Construction Engineering Technology/ Technician

Master's, Doctoral, and Professional Degrees
- Electrical and Electronics Engineering
- Mechanical Engineering
- Bioengineering and Biomedical Engineering

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Skills USA competitions	• Intern at an engineering firm • Shadow a machinist

Sharyland ISD
Industry-Based Certifications

- Autodesk Certified User in Inventor
- Engineering Technology Foundations

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineers	$110,843	481	9%
Industrial Engineers	$97,074	1,263	10%
Mechanical Engineers	$91,107	1,535	11%
Chemical Engineers	$112,819	474	9%
Electrical Engineers	$98,405	1,137	105

Successful completion of the Engineering program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised – November 2022

Engineering
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Applied Engineering	13036200 (1 credit)	None	None
Introduction to Engineering Design (PLTW)	N1303742 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Manufacturing Engineering Technology I	13032900 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Engineering Design and Presentation I	13036500 (1 credit)	Algebra I	None
Computer Integrated Manufacturing (PLTW)	N1303748 (1 credit)	None	None
Digital Electronics	13037600 (1 credit)	Algebra I and Geometry	None
Engineering Science	13037500 (1 credit)	Algebra I, Biology, Chemistry and either Integrated Physics (IPC) or Physics	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Scientific Research & Design	13037200 (1 credit)	Biology, Chemistry and either Integrated Physics (IPC) or Physics	None

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING AND MATH CAREER CLUSTER, PLEASE CONTACT:
Your Junior High or High School Counselor

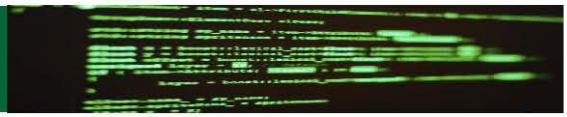
Sharyland ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. For inquiries regarding the nondiscrimination policies, contact our Title IX Coordinator at 1200 N. Shary Road, Mission, TX 78572, or by email at deborahgarza@sharylandisd.org and our Section 504 Coordinator at 1200 N. Shary Road, Mission, TX 78572, by email at azucenagarza@sharylandisd.org or by calling (956) 580-5200.

Science, Technology, Engineering, and Mathematics Career Cluster

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.

Programming and Software Development

Statewide Program of Study



The Programming and Software Development program of study explores the occupations and education opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer applications to run.

Sharyland ISD
Secondary Courses for High School Credit

Level 1
- Fundamentals of Computer Science [1 Credit]

Level 2
- AP Computer Science Principles [1 Credit]

Level 3
- AP Computer Science A, MATH [1 Credit] **(Advanced Course)**
- AP Computer Science A, LOTE [1 Credit] **(Advanced Course)**

Level 4
- Career Preparation I [3 Credits] **(Advanced Course)**

Postsecondary Opportunities

Associates Degrees
- Computer Programming/Programmer General
- Computer Software Engineer
- Computer Science
- Certified Software Analyst

Bachelor's Degrees
- Management Information Systems, General
- Computer Software Engineer
- Computer Science
- Information Science/ Studies

Master's, Doctoral, and Professional Degrees
- Computer Software Engineer
- Computer Science
- Information Science/ Studies

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join TSA • Participate in coding club at school	• Obtain an industry-based certification

Sharyland ISD
Industry-Based Certifications

- CodeHS Python Level 1 Certification
- Certified Entry-Level Python Programmer (PCEP)
- Information Technology Specialist: Java

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Software Developer, Systems Software	$103,334	2,985	25%
Software Developers, Application	$104,499	6,311	30%
Computer Programmers	$79,893	1,454	9%

Successful completion of the Programming and Software Development program of study will fulfill requirements of the Business and Industry endorsement and STEM endorsement if the math and science requirements are met. Revised – August 2022

Programming and Software Development
Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Fundamentals of Computer Science	03580140 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
AP Computer Science Principles	A3580300 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
AP Computer Science A, MATH, LOTE	A3580110 (1 credit) A3580120 (1 credit)	None	None

Level 4

Course Name	Service ID	PREREQUISITES	COREQUISITES
Career Preparation I	12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEEERING, AND MATHEMATICS CAREER CLUSTER,
PLEASE CONTACT:
Your Junior High or High School Counselor

Project Lead The Way – Engineering

Sharyland ISD currently offers the Project Lead the Way (PLTW) Engineering pathway. PLTW provides a comprehensive approach to Science, Technology, Engineering, and Mathematics (STEM) education. Through activity-, project-, and problem-based curriculum, PLTW gives students a chance to apply what they know, identify problems, find unique solutions, and lead their own learning. Their engaging, rigorous teacher professional development model provides teachers the tools to empower students and transform the classroom into a collaboration space where content comes to life.

From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. The PLTW Engineering pathway empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. The program's courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.

If students are interested in enrolling into any of the PLTW Engineering courses, contact your school Counselor to begin the registration process. The course sequence in the Sharyland ISD Project Lead the Way (PLTW) Engineering pathway are as follows:

Freshman Year 9th	Sophomore Year 10th	Junior Year 11th	Senior Year 12th
Introduction to Engineering Design (IED)	Computer Integrated Manufacturing (CIM)	Engineering Science (ES) (Science Credit)	Digital Electronics (DE) (Math Credit)

Science, Technology, Engineering & Mathematics (STEM) Certifications

The table below summarizes the CTE certifications that are offered within the Science, Technology, Engineering & Mathematics (STEM) career cluster, along with the specific course(s) in which each is offered. It is important to note that students must meet specific criteria to qualify to test for these certifications.

Industry-Based Certifications (IBCs)	Certifying Course(s)
OSHA 30 Hour General	Robotics Course Sequence Courses
Autodesk Certified User (ACU) – Inventor for Mechanical Design	*Introduction to Engineering (IED)*
NOCTI – Engineering Technology Foundations	*Computer Integrated Manufacturing*
CodeHS Python Level 1 and Certified Entry-Level Python Programmer (PCEP) (upon passing CodeHS IBC)	*AP Computer Science Principles*
Information Technology Specialist: Java	*AP Computer Science A (Math & LOTE)*

Science, Technology, Engineering & Mathematics (STEM) Course Descriptions

AP Computer Science Principles — TEA # A3580300 — Course # 0442

Grade Placement: 10-12
Credit: 1
Recommended Prerequisite: Algebra I
AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom.

AP Computer Science A — TEA # A3580110 & A3580120 — Course # 0443M & 0443L

Grade Placement: 10-12
Credit: 2 (LOTE and Math Credit)
Recommended Prerequisite: Algebra I
AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.
Note: This course can satisfy a Math and Language Other Than English (LOTE) credit requirements for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate math course sequence and can apply this course to their math graduation requirements.

Computer Integrated Manufacturing PLTW Engineering Program Course — TEA # 13037600 — Course # 0920

Grade Placement: 10-12
Credit: 1
From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry including logic gates, integrated circuits, and programmable logic devices.
Note: This course can satisfy a math credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate math course sequence and can apply this course to their math graduation requirements.

Digital Electronics Honors PLTW Engineering Program Course — TEA # 13037600 — Course # 0913

Grade Placement: 10-12
Credit: 1
From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry including logic gates, integrated circuits, and programmable logic devices.

Note: This course can satisfy a math credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate math course sequence and can apply this course to their math graduation requirements.

Engineering Design and Presentation I — TEA # 13036500 — Course # 0935P
Robotics Program Course

Grade Placement: 9-12
Credit: 1
Prerequisite: Algebra I
Recommended Prerequisite: Principles of Applied Engineering
Engineering Design and Presentation I is a continuation of knowledge and skills learned in Principles of Applied Engineering. 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. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.
Note: This course is only offered once every four years. It is part of the Robotics course sequence and has a competition requirement.

Engineering Science Honors — TEA # 13037500 — Course # 0912
PLTW Engineering Program Course

Grade Placement: 10-12
Credit: 1
Prerequisite: Algebra I and Biology; and Chemistry, IPC, or Physics
Recommended Prerequisite: Geometry
Engineering Science is an engineering course designed to expose students to some of the major concepts and technologies that they will encounter in a postsecondary program of study in any engineering domain. Students will have an opportunity to investigate engineering and high-tech careers. In Engineering Science, students will employ science, technology, engineering, and mathematical concepts in the solution of real-world challenge situations. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Fundamentals of Computer Science — TEA # 03580140 — Course # 0444

Grade Placement: 9-12
Credit: 1
Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. 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 and concepts. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

Introduction Engineering Design — TEA # N1303742 — Course # 0911
PLTW Engineering Program Course

Grade Placement: 9-12
Credit: 1
In this course, students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software and document their work in an engineering notebook.

Manufacturing Engineering Technology I — TEA # 13032900 — Course # 0929P
Robotics Program Course

Grade Placement: 9-12
Credit: 1
Recommended Prerequisite: Algebra I
In Manufacturing Engineering Technology I, students will gain knowledge and skills in the application, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. Students will prepare for success in the global economy. The study of manufacturing engineering will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in a manufacturing setting.
Note: This course is only offered once every four years. It is part of the Robotics course sequence and has a competition requirement.

Principles of Applied Engineering — TEA # 13036200 — Course # 0928P
Robotics Program Course

Grade Placement: 9-10
Credit: 1
Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will understand the various fields of engineering and will be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.
Note: This course is only offered once every four years. It is part of the Robotics course sequence and has a competition requirement.

Robotics I — TEA # 13037000 — Course # 0930P
Robotics Program Course

Grade Placement: 9-12
Credit: 1
In Robotics I, students will transfer academic skills to component designs in a project- based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.
Note: This course is only offered once every four years. It is part of the Robotics course sequence and has a competition requirement.

Scientific Research and Design — TEA # 13037200 (First Time Taken) — TEA # 13037210 (Second Time Taken) — TEA # 13037220 (Third Time Taken) — Course # 0446 CP

Grade Placement: 11–12
Credit: 1
Prerequisite: Biology, Chemistry, Integrated Physics, and Chemistry (IPC), or Physics
Scientific Research and Design has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. These components are integrated with the career and technical education emphasis of helping students gain entry-level employment in high-skill, high-wage jobs and/or continue their education. Students must meet the 40%

laboratory and fieldwork requirement.Students may take this course with different course content for a maximum of three credits.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

Scientific Research and Design TEA # 13037200 (First Time Taken) TEA # 13037210 (Second Time Taken) TEA # 13037220 (Third Time Taken) Course # 0441 Honors

Grade Placement: 11–12
Credit: 1
Prerequisite: Biology, Chemistry, Integrated Physics, and Chemistry (IPC), or Physics
Scientific Research and Design has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. These components are integrated with the career and technical education emphasis of helping students gain entry-level employment in high-skill, high-wage jobs and/or continue their education. Students must meet the 40% laboratory and fieldwork requirement. This course is similar to Scientific Research and Design; however, it incorporates higher-order thinking skills through assessment and synthesis of the presented knowledge combined with exposure to clinical analysis and lab work.Students may take this course with different course content for a maximum of three credits.
Note: This course can satisfy a science credit requirement for students on the Foundation High School Program. Students are encouraged to meet with their Academic Counselor to ensure they are following the appropriate science course sequence and can apply this course to their science graduation requirements.

STC Dual Enrollment Engineering Academy (DEEA) Course # 1006 & 2006

Grade Placement: 11-12
Credit: 1 per course
Prerequisite: Meet South Texas College acceptance criteria; 2-Year Commitment
This South Texas College (STC) Dual Enrollment Engineering Academy (DEEA) is a two year-round dual enrollment program developed for high school juniors and seniors who are seriously interested in pursuing a career in engineering. The purpose of this academy is to increase the number of rural area students committed to careers and service in Manufacturing, Electrical, Industrial Engineering, and others. This academy is designed to encourage area high school students into the engineering profession by providing college course-work and engineering related opportunities that will motivate, educate, and prepare students for higher education in the field of math and science while completing an Associate of Science (AS) degree in Engineering by the end of their high school senior year. With the support of the local engineers, the Dual Enrollment Engineering Academy will promote and participate in efforts that will reinforce the schools' and communities' commitment to prepare students for careers in Engineering. Contact your school Counselor for more information on how to enroll into this program.
Note: This course has an application process in place.