

## Table of Contents

Sharyland Independent School District ..... 6
A Message from Our Superintendent ..... 7
Course Description and Information Guide ..... 8
Graduation, Scheduling, Grading Procedures ..... 9
Graduation Program Overview ..... 9
High School Block Scheduling ..... 9
Grading Guidelines and Policy Procedures ..... 9
Grading Procedures ..... 9
High School Semester Exam Exemption Policy ..... 9
Grade Classifications, Class Ranking, and Graduation Requirements ..... 10
Course Offerings and Availability ..... 10
Class Ranking ..... 10
Calculating Class Rank ..... 10
Schedule Changes ..... 11
Course Level Changes ..... 11
Credit Recovery ..... 11
Texas Virtual Network ..... 11
Distinguished Level of Achievement ..... 12
Advantages to the Distinguished Level of Achievement Graduation Plan ..... 12
Performance Acknowledgements ..... 13
High School Graduation Requirements ..... 15
Sharyland ISD Endorsements ..... 16
Science Technology Engineering and Mathematics (STEM) ..... 16
Technology Applications Coursework ..... 22
Career Exploration Program ..... 23
Career Cruising/Xello ..... 23
Four-Year Personal Graduation Plan (PGP) ..... 23
Go Center ..... 23
State Assessments and Graduation Requirements ..... 24
What is STAAR? ..... 24
What are the general testing requirements for students enrolled in high school courses? ..... 24
State of Texas Assessment of Academic Readiness (STAAR) End-of-Course Performance Standards ..... 25
STAAR EOC Student Scores ..... 26
Special Programs ..... 27
English Language Learners ..... 27
Section 504 ..... 28
Section 504, Students with Dyslexia and Related Disorders ..... 29
Special Education Services ..... 29
College and Career Readiness Programs ..... 30
Pre-Advanced Placement and Advanced Placement Courses ..... 30
Sharyland ISD Advanced Placement Scholar Academy ..... 31
Dual Credit Opportunities for Sharyland ISD Students ..... 33
Sharyland ISD Dual Credit Core Complete Academy ..... 33
Sharyland Advanced Academic Academy- SA3 ..... 34
Career and Technical Education ..... 35
Health Science Institute - Healthcare Pathways ..... 36
Project Lead The Way - Engineering Pathway ..... 39
Curriculum and Instruction ..... 40
English Language Arts ..... 41
Mathematics Courses ..... 49
Science Courses ..... 58
Social Studies Courses ..... 70
Languages Other Than English ..... 78
Fine Art Courses ..... 83
Health \& Physical Education Courses ..... 90
Other Elective Courses ..... 93
Career and Technical Education ..... 95
Sharyland ISD Career Cluster Offerings ..... 96
Career and Technical Student Organizations ..... 99
Career Development Coursework ..... 102
Agriculture, Food, and Natural Resources Courses at a Glance ..... 104
Agriculture, Food, and Natural Resources Course Flowchart ..... 105
Agriculture, Food, and Natural Resources Potential Certifications ..... 106
Agriculture, Food, and Natural Resources Courses ..... 107
Architecture \& Construction Courses at a Glance ..... 110
Architecture \& Construction Courses Flowchart ..... 111
Architecture \& Construction Potential Certification ..... 112
Architecture \& Construction Courses ..... 113
Arts, A/V Technology \& Communications Courses at a Glance ..... 116
Arts, A/V Technology \& Communications Course Flowchart. ..... 117
Arts, A/V Technology \& Communications Potential Certifications ..... 118
Arts, A/V Technology \& Communications Courses ..... 119
Business Management \& Administration/ Finance Courses at a Glance ..... 122
Business Management \& Administration/Finance Course Flowchart ..... 123
Business Management \& Administration/Finance Potential Certifications ..... 124
Business Management \& Administration/Finance Courses ..... 125
Education \& Training Courses at a Glance ..... 129
Education \& Training ..... 130
Education \& Training Error! Bookmark not defined.
Education \& Training Courses ..... 132
Health Science ..... 135
Health Science ..... 136
Health Science ..... 137
Health Science ..... 138
Human Services ..... 142
Human Services ..... 143
Human Services ..... 144
Human Services ..... 145
Information Technology ..... 148
Information Technology ..... 149
Information Technology ..... 150
Law, Public Safety, Corrections \& Security ..... 153
Law, Public Safety , Corrections \& Security ..... 154
Law, Public Safety, Corrections \& Security ..... 155
Law, Public Safety, Corrections, and Security ..... 156
Science, Technology, Engineering \& Mathematics ..... 159
Science, Technology, Engineering \& Mathematics ..... 160
Science, Technology, Engineering \& Mathematics ..... 161
Science, Technology, Engineering, \& Mathematics ..... 162
Transportation, Distribution \& Logistics ..... 169

Transportation, Distribution \& Logistics.......................................................................................................................... 170
Transportation, Distribution, and Logistics................................................................................................................... 171

## 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 and 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 Parents and Students,

As you carry out your academic journey at Sharyland Independent School District, we would like you to know that as a district, we do the utmost to provide EVERY student with the very best opportunities possible. The department of curriculum and \& instruction is committed to providing students with innovative curriculum, $21^{\text {st }}$ century college and career readiness skills, and differentiated instruction to meet all student needs. The Sharyland ISD Curriculum Guide is designed help you build the best foundation toward a productive and very successful future. Sharyland ISD is a highly recognized district for its phenomenal state achievement scores, advanced curriculum, its wide-range of highly competitive academic and extracurricular courses, and outstanding programs for postsecondary readiness. Each decision you make while in high school will impact your future, therefore it is imperative that you learn the information listed in this guide, and choose the path that is right for YOU. At Sharyland ISD, we pride ourselves in taking student interest inventories and create programs and academic pathways that fit our students' interests. Students can choose from a wide array of certification options, career and technical fields, dual credit options, AP programs, and so much more.

As your superintendent, it is my hope that you challenge yourself and choose the right pathway for you, one that meets your goals and makes you the best individual you can be!

Sincerely,

[^0]
## Course Description and Information Guide

The Sharyland ISD High School Curriculum Guide serves as an information guide designed to help students meet course requirements, graduation requirements, and become familiar all academic pathways that will lead them toward a successful future. At Sharyland ISD, 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 technology 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.


[^1]
## Graduation, Scheduling, Grading Procedures

## Graduation Program Overview

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:

- All Texas public high school students must declare an endorsement
- 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
- A 22-credit foundation plan is the core of the Texas high school diploma program- Available with administrative approval only


## 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.

## 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.

## Grading Procedures

The Sharyland ISD Grading Policy and Procedures are accessible through this link: https://www.sharylandisd.org/departments/curriculum/guidelines policies

## High School Semester Exam Exemption Policy

https://www.sharylandisd.org/departments/curriculum/guidelines policies

## Grade Classifications, Class Ranking, and Graduation Requirements

All students entering high school as a freshmen ( $9^{\text {th }}$ Grade) will need to meet the following credit requirements for grade level promotion:

| Grade and Classification | Credits | Credits needed for each year |
| :--- | :--- | :--- |
| $9^{\text {th }}$ grade - Freshman | $0-6$ credits | Successfully promoted to $9^{\text {th }}$ grade. 6 credits <br> needed for $10^{\text {th }}$ grade classification |
| $10^{\text {th }}$ grade - Sophomore | $6-12$ credits | 12 credits needed for $11^{\text {th }}$ grade classification |
| $11^{\text {th }}$ grade - Junior | $12-18$ credits | 18 credits needed for $12^{\text {th }}$ grade classification |
| $12^{\text {th }}$ grade - Senior | $18+$ credits | 26 credits needed for graduation with an <br> endorsement |

## 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 V) 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.

## 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 $1^{\text {st }}$ semester will receive the weighted points for that semester only.
Lateral course changes are not allowed (i.e., Pre-AP English II to another Pre-AP English II class). Only changes from AP to Pre-AP, AP to CP, or Pre-AP to CP will be allowed by campus administration.

## Credit Recovery

Students may gain credit through computer assisted instruction or credit by exam, for courses previously failed. Not all courses are eligible for recovery. Students must contact their school counselor for more information.

## Texas Virtual 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.org

## Distinguished Level of Achievement

The Distinguished Level of Achievement opens a world of educational and employment opportunities for you beyond high school. The Distinguished Level of Achievement will:
$\Rightarrow$ Allow students to compete for Top 10\% automatic admissions eligibility at any Texas public university
$\Rightarrow$ Position students among those first in line for a Texas Grant to help pay for university tuition and fees
$\Rightarrow$ Ensure you are a more competitive applicant at the most selective colleges and universities
$\Rightarrow$ Successful completion of an endorsement in your area of interest
$\Rightarrow$ Requires more math and more science than the Foundation High School program
$>$ Four credits in math including Algebra II
> Four credits in science

## Advantages to the Distinguished Level of Achievement Graduation Plan

Most of the very best jobs available now and in the future require education and training beyond a high school diploma. To best prepare yourself for the transition to post - high school education or quality workforce training, choosing and taking the right classes is essential. The Distinguished Level of Achievement will ensure the best preparation for your future (https://tea.texas.gov/communications/grad toolkit/DLA-benefits.pdf).
$\checkmark$ Opportunity to earn an endorsement in an area of interest
$\checkmark$ More college and university options
$\checkmark$ More financial aid options
$\checkmark$ Better preparation for college-level coursework at community/technical colleges and universities
$\checkmark$ Opportunity for immediate enrollment in classes related to your chosen field of study
$\checkmark$ Strong foundation to successfully complete an industry workforce credential or college degree.

# For more information on High School Graduation Plans please visit: <br> https://tea.texas.gov/communications/brochures.aspx 



## Performance Acknowledgements

Students may earn a Performance Acknowledgement through outstanding performance in one or more of the following areas:


1. 12 hours of college academic courses, including those taken for dual credit as part of the Texas core curriculum, and advanced technical credit courses, including locally articulated courses, with a grade of the equivalent of 3.0 or higher on a scale of 4.0 ; or
2. Associate degree while in high school.


## College Board Advanced Placement

1. A score of 3 or above on a College Board Advanced Placement examination; or
2. Earning a score on the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT®) that qualifies the student for recognition as a commended scholar or higher by the College Board and National Merit Scholarship Corporation, as part of the National Hispanic Recognition Program (NHRP) of the College Board or as part of the National Achievement Scholarship Program of the National Merit Scholarship Corporation;
3. Achieving the college readiness benchmark score on at least two of the four subject tests on the ACT AspireTM examination;
4. Earning scores of at least 410 on the evidence-based reading section and 520 on the mathematics section of the SAT®; or
5. Earning a composite score on the $\mathrm{ACT®}$ examination of 28 (excluding the writing subscore).

## Bilingualism \& Biliteracy

1. Completing all English language arts requirements and maintaining a minimum grade point average (GPA) of the equivalent of 80 on a scale of 100 ; and
2. Satisfying one of the following:

- Completion of a minimum of three credits in the same language in a language other than English with a minimum GPA of the equivalent of 80 on a scale of 100 ; or
- Demonstrated proficiency in the Texas Essential Knowledge and Skills for Level IV or higher in a language other than English with a minimum GPA of the equivalent of 80 on a scale of 100; or
- Completion of at least three credits in foundation subject area courses in a language other than English with a minimum GPA of 80 on a scale of 100; or
- Demonstrated proficiency in one or more languages other than English through one of the following methods:
- A score of 3 or higher on a College Board Advanced Placement examination for a language other than English; or
- Performance on a national assessment of language proficiency in a language other than English of at least Intermediate High or its equivalent. Participated in and met the exit criteria for a bilingual or English as a second language (ESL) program; and Scored at the Advanced High level on the Texas English Language Proficiency Assessment System (TELPAS).


## Performance Acknowledgements continued:



1. Performance on an examination or series of examinations sufficient to obtain a nationally or internationally recognized business or industry certification; or
2. Performance on an examination sufficient to obtain a government-required credential to practice a profession.
3. Nationally or internationally recognized business or industry certification shall be defined as an industryvalidated credential that complies with knowledge and skills standards promulgated by a nationally or internationally recognized business, industry, professional, or government entity representing a particular profession or occupation that is issued by or endorsed by:

- a national or international business, industry, or professional organization;
- a state agency or other government entity; or
- a state-based industry association.

4. Certifications or licensures for performance acknowledgements shall:

- be age appropriate for high school students;
- represent a student's substantial course of study and/or end-of-program knowledge and skills;
- include an industry-recognized examination or series of examinations, an industry-validated skilltest, or demonstrated proficiency through documented, supervised field experience; and
- represent substantial knowledge and multiple skills needed for successful entry into a high-skill occupation.

Statutory Authority: The provisions of this $\$ 74.14$ issued under the Texas Education Code, $\{\S 7.102,28.002$, and 28.025.Source: The provisions of this §74.14 adopted to be effective July 8, 2014, 39 TexReg 5149; amended to be effective August 22, 2016, 41 TexReg 5040.

## 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 $\S 74.12$ of the Texas Administrative Code and the curriculum requirements for at least one endorsement specified in $\S 74.12$ of this title (relating to Endorsements).

| Foundation Program with Endorsement | $26$ <br> Credits | Foundation Program with Endorsement PLUS <br> Distinguished Level of Achievement | $26$ <br> Credits |
| :---: | :---: | :---: | :---: |
| Advanced English Courses: English IV, Advanced Journalism, Debate III, Yearbook III, AP English Literature, College Prepartory 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 (3 Credits) |  |  |
| World Geography or World History | 1 | World Geography or World History |  |
| U.S. History | 1 | U.S. History | 1 |
| U.S. Government | .5 | U.S. Government | 1 |
| Economics | .5 | Economics | .5 |



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.

## Sharyland ISD Endorsements

All Sharyland ISD students must select an endorsement upon entering $9^{\text {th }}$ grade. Students earn an endorsement by completing the curriculum requirements for the endorsement, including 4 credits in both math and science, and 2 additional elective credits. Students are able to 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. Sharyland ISD currently offers the following endorsements:

- STEM,
- Business \& Industry,
- Public Services,
- Arts and Humanities, and
- Multidisciplinary Studies





## CTE:

Coherent sequence of courses for 4 or more credits in CTE

- $\underline{\mathbf{2}}$ courses in same cluster, and
- at least 1 advanced CTE course, and

Courses may be selected from:

- Chapter 130 CTE,
- Chapter 127 Career Development, or
- CTE Innovative Courses approved by the Commissioner of Education
- Final course must be from:

Chapter 130, Subchapter O, or


Ence, Technology, Mathermatics
Chapter 127, Subchapter B Career'Prep I or II, and Problems and Solutions if the course addresses a STEM-related field

## COMPUTER SCIENCE:

- Coherent sequence of 4 credits in COMPUTER SCIENCE
(SISD does not currently offer this endorsement option.)


## MATH:

- 3 credits in MATHEMATICS
- Algebra II, and
- $\quad$ additional MATH courses for which Algebra II is a pre-requisite
(Total of 5 credits: Algebra I, Geometry, Algebra II, and two additional math courses for which Algebra II is a prerequisite.)


## SCIENCE:

- 4 credits in SCIENCE
- Chemistry,
- Physics, and
- 2 additional SCIENCE courses
(Total of 5 credits: Biology, Chemistry, Physics, and two additional science courses.)


## COMBINATION:

## 3 additional credits

- In addition to Algebra II, Chemistry, and Physics,
- Coherent sequence of 3 additional credits from no more than 2 of the previous categories: CTE, COMPUTER SCIENCE, MATH, or SCIENCE17

- Final course in sequence must be


## A.) CTE:

* Coherent sequence of courses of 4 or more credits:
- At least 2 courses in the same cluster, and
- At least 1 advanced CTE course, and

Courses may be selected from:

- Chapter 130 CTE,
- Chapter 127 Career Development, or
- CTE Innovative Courses approved by the Commissioner of Ed. selected from one of the following:



## B.) English:

* Four English credits from Chapter 110 to include three levels in one of the following areas:


## c.) Tech Apps:

(SISD does not currently offer this endorsement option.)

## * Four Technology Applications credits

 by selecting from the following:- Digital Design and Media Productions,
- Digital Art and Animation,
- 3-D Modeling and Animation,
- Digital Communications in the $21^{\text {st }}$ Century,
- Digital Video and Audio Design,
- Web Communications,
- Web Design,
- Web Game Development, or
- Ind. Study in Evolving/Emerging Technologies


## D.) Combination:

* A coherent sequence of four credits from Options A, B, or C above.


## Public Services

## A.) STE:

* Coherent sequence of courses for 4 or more credits in CTE that consist of:
- At least 2 courses in the same cluster, and
- At least 1 advanced course, and

Courses may be selected from:

- Chapter 130 CTE,
- Chapter 127 Career Development, or
- CTE Innovative Courses approved by the Commissioner of Education
- Final course in sequence must be selected from one of the following:



## B.) JROTC:

* Four courses in JROTC




## Multidisciplinary Studies


A.) Advanced Courses:
(to enter Workforce or Postsecondary Education)
4 Advanced Courses that prepare students to enter the workforce successfully or postsecondary ed. without remediation from within 1 endorsement area or among endorsement areas that are not in a coherent sequence
B.) Foundation Subjects:

Highly Recommended $4 \times 4$
4 Credits in each of the 4 foundation subject areas to include:

English IV, and
Chemistry and/or Physics

## c.) AP, IB, DC

4 Credits in
Advanced Placement, IB, or Dual
Credit selected from:

English, Math, Science, Social Studies, Economics, LOTE, or Fine Arts

## Technology Applications Coursework

Starting with the class of 2019 and beyond, the courses in the chapters listed below can be utilized to fulfill the locally required technology applications credit at Sharyland ISD.

| Title 19, Part 2 <br> Texas Administrative Code (TAC) <br> Chapters |  | Subchapters |
| :---: | :--- | :--- |

## Career Exploration Program

## Career Cruising/Xello

Career Cruising/Xello is a web-based career exploration tool that can assist students in identifying suitable career options based on their interests. Students can use this tool to learn more about themselves and to develop their academic and career plans. Career Cruising/Xello offers several assessments:

- Interest Inventory
- Ability Profiler
- Skills Inventory
- Learning Styles Inventory

In addition, the content in this tool is rich with information on careers, education, employment trends, and more. Each student has access to a personal account, which also comes with an e-portfolio. The e-portfolio stores a student's yearly assessment results and favorite information on schools and careers. Students keep the same account throughout their junior high and high school years allowing them access to their assessment and school information from year to year.
Students can start using Career Cruising in either $7^{\text {th }}$ or $8^{\text {th }}$ grade and continue into high school. Academic 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 they are going to pursue in high school. Students and parents will confirm the endorsement with high school counselors and annually review and update their Personal Graduation Plan (PGP). Students will need to periodically meet with their assigned Academic Counselor or CTE Counselor to ensure they are on track in fulfilling their endorsement and high school graduation requirements.

## Four-Year Personal Graduation Plan (PGP)

The Four Year Personal Graduation Plan (PGP) is created at the end of the student's eighth grade year and reviewed each year and requires student and parental approval. Personal graduation plans identify educational goals for each student to include monitoring and intervention information, and other evaluation strategies. In order to receive a diploma from Sharyland ISD, students must meet all graduation requirements and pass the five (5) required STAAR End-of-Course state assessments. Each personal graduation plan (PGP) identifies the courses that will satisfy program requirements and prepare students for their chosen post-secondary education and career.

## 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 Mrs. Melinda Zuniga (956) 271-1600 ext. 4027 | Sharyland Advanced Academic Academy College and Career Readiness Advisor (956) 584-6467 ext. 4426 |
| :---: | :---: | :---: |

## 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
- Writing at grades 4 and 7
- 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 legislatures. 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) End-of-Course Performance Standards

Figure: 19 TAC §101.3041(c)(1)
State of Texas Assessments of Academic Readiness End-of-Course Assessments Performance Standards

| Assessment | 2012-2015 <br> Satisfactory <br> Performance | Approaches <br> Grade Level <br> Performance | Meets Grade <br> Level | Masters Grade <br> Level |
| :---: | :---: | :---: | :---: | :---: |
|  | 3500 | 3550 | 4000 | 433 |
| Algebra II |  | 3550 | 4000 | 4411 |
| Biology | 3500 | 3550 | 4000 | 4576 |
| English I | 3750 | 3775 | 4000 | 4691 |
| English II | 3750 | 3775 | 4000 | 4831 |
| English III |  | 3775 | 4000 | 4546 |
| U.S. History | 3500 | 3550 | 4000 | 4440 |

* The standard in place when a student first takes an EOC assessment is the standard that will be maintained throughout the student's school career. Standards apply beginning with students first enrolled in Grade 9 or below in 2011-2012.


## State of Texas Assessments of Academic Readiness (STAAR®) <br> 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.

## 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 decisionmaking.

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 contentbased 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.

## 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

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:

## English Language Learners Campus Support continued:

- 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 nondiscrimination 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
$\square$ Physiological disorder or condition,
$\square$ Cosmetic disfigurement, or
$\square$ Anatomical loss affecting one or more of the following body systems: neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive; digestive; genito-urinary; 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.pdf3

Texas Education Code (TEC) $\S 38.003$ defines dyslexia in the following way:
(1) "Dyslexia" means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell, despite conventional instruction, adequate intelligence, and sociocultural opportunity.
(2) "Related disorders" include disorders similar to or related to dyslexia such as developmental auditory imperceptions, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability. For more information on Dyslexia and related disorders, please visit: http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.38.htm\#38.003an

## Section 504, Students with Dyslexia and Related Disorders

Each Sharyland ISD campus has an assigned Section 504 coordinator who oversees the campus 504 program and reports directly to the District 504 Coordinator. Each campus 504 Coordinator monitors and holds committee meetings to progress monitor current students in the program, and initiate the 504 procedures for each students for each calendar year. The campus 504 Coordinator also evaluates student documentation for all students who may qualify for Section 504 services. The 504 Coordinator is also responsible for those students who are eligible for dismissal from the 504 program. Sharyland ISD schools serve students with dyslexia or related disorders in a variety of ways as determined by a campus 504 committee. Services may include specialized instruction, classroom accommodations, and assistive technology. See the campus 504 Coordinator for more information about services for qualifying students. For additional information, you may contact our District 504 Coordinator, Dr. Debra Arce at (956) 580-5200.

## 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 specified 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.

Sharyland ISD students can participate in one or a combination of the following programs:
$\Rightarrow$ Advanced Placement Scholar Academy
$\Rightarrow$ Dual Credit Core Complete Academy ( 42 college hours while in high school)
$\Rightarrow$ Sharyland Advanced Academic Academy
$\Rightarrow 4 \times 4$ graduation plan (enroll and complete all 4 core subjects while in high school)
$\Rightarrow$ Career and Technology Education Program
$\Rightarrow$ Sharyland ISD Health Science Institute - Healthcare Pathway
$\Rightarrow$ Project Lead The Way - Engineering Pathway
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 courses. 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 course work 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 for study. It is important that students visit with their academic counselor prior to participating in any program.

##  Program Placement Courses

"You'll see the benefits of taking an AP class right away. In AP classes, just like in college, you'll face new challenges and learn new skills in the subjects you care about. All with the support of your classmates and teachers." - AP Student

AP courses provide students with the opportunity to take college-level courses while still in high school. These courses are taught using college-level resources and require in-depth reading of texts from multiple genres, periods, and cultures. Pre-AP courses provide students with the skills and knowledge base necessary to be successful in Advanced Placement Courses https://www.collegeboard.org.
Throughout a student's high school career, College Board's AP Program offers high school students the opportunity to take Pre-Advanced Placement (Pre-AP) courses, which prepare students for Advanced Placement courses (AP) which prepare students for college level course work. Upon successful completion of an Advanced Placement course and a score of a 3, 4, or 5 on College Board's Advanced Placement exam, students may receive college credit at the college or university of their choice. College Board recommends that Pre-AP courses be taken prior to enrollment in AP courses. Formal identification of Gifted and Talented (GT) is not required to participate in Pre-AP and/or AP courses. To learn more about Pre-AP or AP courses, please visit: https://apstudent.collegeboard.org/exploreap/the-ap-experience

## 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 AP Scholar Academy?

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

- Challenging courses of study to include Pre-Advanced Placement and Advanced Placement courses
- Supportive framework for students willing to tackle advanced courses
- Opportunities for students to participate in other academic and extracurricular activities
- College tours in $10^{\text {th }}$ and $11^{\text {th }}$ grade
- Peer mentoring and tutoring including portfolio creation
- 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
- AP Capstone Diploma Program

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
- Sign a letter of intent in $8^{\text {th }}$ grade or $9^{\text {th }}$ grade
- Requirements for various levels are specified in the chart on following page


## Graduation Accolades

- AP Scholar stoll


## AP Scholar with Honor Stoll

- AP Scholar with Distinction Stoll and white graduation gown Sharyland ISD AP Scholar

| Minimum Course Work Requirements | AP Scholar with Honors | AP Scholar with Distinction |
| :---: | :---: | :---: |
|  | 4 courses at Pre-AP/ AP level in any subject area during $9^{\text {th }}$ and $10^{\text {th }}$ grade | Complete 6 total AP level courses in high school |
|  |  |  |
| Additional Requirements | 4 additional AP-level courses in any subject during the final two years | Students complete at least one AP course in each of the 4 core subject areas in the final two years |
|  |  |  |
|  | Score 3+ on at least two AP exams prior to $12^{\text {th }}$ grade |  |
|  | Maintain a minimum GPA of 3.4 |  |

For more information of 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 $\mathbf{4 2}$ college credit hours in general core curriculum while in high school. The requirements to qualify are as follows:
$\square$ Meet PreAP Course Standards and successfully complete two (2) Pre-AP core courses during freshman ( $9^{\text {th }}$ grade) year.
$\square$ Submit a completed Apply Texas Application online at http://www.applytexas.org indicating Dual Credit.
$\square$ Take and successfully pass the Texas Success Initiative (TSI) assessment (or TSI exemption scores). The
South Texas College Academic Placement scores are as follows:
TSI Reading: 351+
TSI Writing: Multiple Choice 340/ Essay score 4 -or- Multiple Choice 339/ Essay score 5 TSI Math: 350+
$\square$ 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: 1070 combined score (Verbal/Critical Reading and Math) with a 500 Verbal/Critical Reading and 500 Math
$\square$ Visit the Go Center for details and to sign-up for the TSI
- Additional Incentives
- LAST 12 college hours are FREE of charge; Remaining hours $\$ 50$ per course
- FREETextbooks
- Assigned Mentors
- College Field Trips $11^{\text {th }}$ grade year
- Accolade for graduation with distinction

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.

## Sharyland Advanced Academic Academy- SA3

Sharyland Advanced Academic Academy is a designated Early College High School that gives Sharyland ISD students the opportunity to earn a high school diploma, up to 60 college credit hours, or an associate's degree in the field of their choice.

Sharyland Advanced Academic Academy provides dual credit at no cost to students, offers rigorous instruction and accelerated courses, provides academic and social support services to help students succeed, increases college readiness, and reduces barriers for college success. Sharyland Advanced Academic Academy was created to provide a culture focused on intellectual development, specific core knowledge and skills, and guidance for students as they embark on their journey towards a postsecondary bachelor's and potential graduate degree education. Only students at SA3 have the opportunity to take courses in any associate's degree offered at South Texas College.

Students may apply to SA3 during the spring semester of their $8^{\text {th }}$ grade year. Sharyland Advanced Academic Academy is one of the highest ranked early college high schools in the region for the following reasons;


SHARYLAND ADVANCED ACADEMIC ACADEMY

## SA3 currently has the HIGHEST associate degree completion in the region!

| Highest TSI completion rates | College and University tours <br> $9^{\text {th }}-12^{\text {th }}$ grade |
| :---: | :---: |
| Highest projected associate's degree <br> completion in the entire region | Opportunity for AP Capstone Diploma <br> Program |
| Highest state assessment pass rates | 60+ college hours taken at SA3 and |
| STC |  |

## 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 a 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, A/V Technology, and Communications
- Business Management and Administration
- Education and Training
- Finance
- Health Science
- Human Services
- Information Technology
- 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.



HEALTH SCIENCE INSTITUTE SHARYLAND I.S.D.

Sharyland ISD created a Health Science Institute (HSI) for students that started as high school freshman during the 2018-2019 school year and thereafter. Our HSI was established to provide students with the educational foundation to be successful in the healthcare professions. 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 postsecondary 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 one of our Health Science Institute pathways, they can submit an Early Intent application during their eightgrade year in junior high school and can then apply for the specific pathway of interest during the spring of their freshman year in high school. It is important to note that all of these pathways include dual credit coursework with 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 intent 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 we have available as part of our Health Science Institute are as follows:


The Patient Care Assistant (PCA) pathway prepares students to provide basic nursing care to adults, children, infants and the elderly. After successful completion of the Texas Department of Aging Nurse Aide Competency Examination, students will focus on acute care and specialized patient care. Entry-level skills in phlebotomy, EKG, and monitor technician are included. PCAs typically work in medical centers such as nursing homes or hospitals.

## Certifications:

- Registry with Texas Department of Aging as a Nurse Aid (CNA)
- Three American Alzheimer's Professional Certificates
- Essential Care
- Activities for Daily Living
- Advance Dementia Care
- National Certification in Phlebotomy
- National Certification in EKG Technician
- National Certification in Patient Care Technician
- South Texas College PTCA Certificate

The Medical Office Specialist pathway prepares students as a health care worker with medical office administrative skills for managing the front office, medical records, and medical insurance. Medical Office Specialists perform various administrative activities such as handling electronic medical records, documenting and filing, billing and insurance, scheduling appointments and referrals and can work in a variety of medical centers including: blood banks, cancer centers, surgical centers, hospitals, medical laboratories, medical offices, specialty clinics, and specialty hospitals.

Certification: National Certified Medical Office Assistant (NCMOA)
The Medical Assistant (MA) pathway prepares students as multi-skilled health care professionals with a strong background in basic patient care and assessment, medical laboratory procedures, and proper medical office administrative procedures. Medical Assistants perform various clinical and laboratory procedures such as phlebotomy, injections (allergies and vaccines), urinalysis, EKG's, patient histories, prepping patients for exams, and CLIA waived screenings. MAs work in a variety of medical centers including: blood banks, cancer centers, surgical centers, hospitals, medical laboratories, medical offices, specialty clinics, and specialty hospitals.

## Certifications:

- National Certified Medical Office Assistant (NCMOA)
- National Certified Medical Assistant (NCMA)
- Nationally Certified Phlebotomy Technician (NCPT)
- National Certified ECG Technician (NCET)

The Emergency Medical Technician (EMT) pathway prepares students to deliver out-of-hospital emergency care at the scene of an accident or a medical emergency. EMTs typically work at 911 ambulance companies, flight paramedics, emergency rooms, transport teams, and fire departments.

## Certification: National Registry of Emergency Medical Technicians (NREMT) Basic EMT

The Pharmacy Technician pathway equips students with knowledge, technical skills, and work habits required for an entry-level position in the field of pharmacy. Pharmacy technicians help pharmacists dispense prescription medication to customers or health professionals. They receive written prescriptions and confirm their accuracy, and can measure and package medications, and label prescriptions. Pharmacy Technicians typically work in pharmacy chains, independent retail pharmacies, or hospital pharmacies. Note that this pathway provides high school students with the opportunity to complete the first 30 credit hours of the 60credit hour South Texas College Pharmacy Technology Associate's Degree Program.

The Pre-requisite Coursework Common to Many Medical Bachelor's Degree Programs pathway enables students to take general pre-requisite 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 pre-requisite coursework they take as part of this pathway will be applicable. Students are also encouraged to call the post-secondary college or university they intent 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.

## Project Lead The Way - Engineering Pathway



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:

| $8^{\text {th }}$ Grade | Freshman Year <br> gth $^{2}$ | Sophomore Year <br> $10^{\text {th }}$ | Junior Year <br> $11^{\text {th }}$ | Senior Year <br> $12^{\text {th }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Gateway to <br> Technology <br> (GTT) | Introduction to <br> Engineering <br> Design <br> (IED) | Civil Engineering <br> and <br> Architecture <br> (CEA) | Engineering <br> Science <br> (ES) | Digital <br> Electronics <br> (Science Credit) |

## 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, physical education, and technology applications).

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 118. Economics with Emphasis on the Free Enterprise System and Its Benefits
Chapter 126. Technology Applications
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
Pre-AP English I
English II
Pre-AP English II
English for Speakers of Other Languages I
English for Speakers of Other Languages II


English III
English III Honors
AP English Language \& Composition (III)
English III Dual Credit
English IV
English IV Honors
English IV Dual Credit
AP English Literature and Composition (IV)
Newcomers English Language Development (NELD A\&B)
Reading I-III


Read 180
Creative Writing
Journalism I
Advanced Journalism: Yearbook I-III
Advanced Journalism: Newspaper I-III
Debate I-III
College Preparatory ELA (HB 5)
Practical Writing

shabyland adyanced academic academy

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.

## 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.

## Recommended Grade Placement: 9 <br> Credit: 1

English I Pre-AP 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 $11^{\text {th }}$ and $12^{\text {th }}$ 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. Pre-AP English I 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 course work. This course requires successful performance on the STAAR English I End-of-Course examination for graduation. Summer reading is a district requirement for this course. The summer reading assignment must be completed and submitted by the designated due date.

## Recommended Grade Placement: 10 <br> 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 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.

## Pre-AP English II

## TEA \# 03220200

Course \# 0130

## Recommended Grade Placement: 10

## Credit: 1

Pre-AP English II 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. Pre-AP English II 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 course work. This course requires successful performance on the STAAR English II End-of-Course assessment for graduation. Summer reading is a district requirement for this course. The summer reading assignment must be completed and submitted by the designated due date.

Recommended Grade Placement: 9<br>Credit: 1<br>Prerequisite: LPAC Recommendation<br>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

## Grade Placement: 10

Credit: 1
Prerequisite: LPAC Recommendation
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
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. Summer reading is a district requirement for this course. The summer reading assignment must be completed and submitted by the designated due date.

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 \& Composition (III)

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 course work. This course will follow the AP English Language and Composition Advanced Placement requirements outlined in the AP College Board Course and Exam Description. Summer reading is a district requirement for this course. The summer reading assignment must be completed and submitted by the designated due date.

## English IV

## 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 connected 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

## 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.
Summer reading is a district requirement for this course. The summer reading assignment must be completed and submitted by the designated due date.

## English IV Dual Credit

TEA \# 03220400
Course \# 0150D

## 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 Literature and Composition (IV)

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 course work. This course will follow the AP English Literature and Composition Advanced Placement requirements outlined in the AP College Board Course and Exam Description. Summer reading is a district requirement for this course. The summer reading assignment must be completed and submitted by the designated due date.

## Grade Placement: 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 l-III

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

## Grade Placement: 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.

## Read 180

TEA\# 03270800
Course \# 0106

## Grade Placement: 10

## Credits: 1

## Prerequisite: Met criteria

READ 180 is designed to help students acquire and activate the background and content knowledge that is essential to reading comprehension. The program provides each student with a unique learning opportunity that encourage them to make meaning through critical thinking, to view and articulate important issues from multiple perspectives, and to accelerate language development and critical comprehension skills. Students are enrolled in the course if they meet program qualifications. The program directly addresses individual needs through differentiated instruction, adaptive and instructional software, high-interest literature, and direct instruction in reading, writing, and vocabulary skills.

## Creative Writing <br> TEA \# 03221200 <br> Course \# 0125

## Grade Placement: 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.

## Course \# 0168 (I), 0169 (II), 0170 (III)

Grade Placement: 9-12
Credit: 1
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: Yearbook I-III <br> TEA \# 03230110 (I), 03230120 (II) 03230130 (III) Course \# 0160 (I), 0162 (II), 0164 (III)

## Grade Placement: 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.

## Advanced Journalism: Newspaper I-III TEA \# 03230140 (I), 03230150 (II), 03230160 (III) Course \# 0169 (I), 0170 (II), 0171 (III)

## Grade Placement: 9-12

Credit: 1 per course
Students enrolled in Advanced Journalism: Newspaper 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: Newspaper 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: Newspaper 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.

## Grade Placement: 9-12

## Credits: 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 ELA (HB 5) <br> TEA\# CP110100 <br> Course \# 0925

## Grade Placement: 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 $12^{\text {th }}$ 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 \# 0193
## Grade Placement: 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
Pre-AP Algebra I
Algebra I ESL
Algebra I Extended
Geometry
Pre-AP Geometry


Mathematical Models with Applications
Algebra II
Algebra II Honors
Advanced Quantitative Reasoning
Pre-Calculus
Pre-AP Pre-Calculus
Pre-AP Pre-Calculus / 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 Electronics Honors (CTE Program Course)
Accounting II Honors (CTE Program Course)


SHARYLAND ADYANCED ACADEMIC ACADEMY

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.

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.

Grade Placement: 9

## Credit: 1

Pre-AP 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. Pre-AP 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 course work. This course requires successful performance on the STAAR Algebra I End-of-Course assessment for graduation.

Algebra I ESL
TEA \# 03100500
Course \# 0363
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.

## Grade Placement: 9

## Credit: 1

Algebra I extended incorporates comprehension of number and algebraic methods from grades 6-8, and integrates graphing, solving linear functions, and understanding equations and inequalities in a year-long course. 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. Algebra I Extended is the year-long version of the Algebra I accelerated block course. This course requires successful performance on the STAAR Algebra I End-of-Course assessment for graduation.

## Geometry

TEA \# 03100700
Course \# 0370

## 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.

## Pre-AP Geometry

## TEA\# 03100700

Course \# 0372
Grade Placement: 9, 10

## Credit: 1

## Prerequisite: Algebra I

In Pre-AP Geometry, 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 student for dual credit, advanced placement (AP), and college level course work.

## 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 KindergartenGrade 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

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 pre-requisite course for most fourth year mathematics courses and carries mathematical concepts that connect to the college and career readiness pathway.

## 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 Honors carries mathematical concepts that focus on additional Algebra II concepts to prepare students for dual credit, advanced placement (AP), and college level course work.

## Grade Placement: 11 <br> Credit: 1 <br> 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 welleducated 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-AP Pre-Calculus

## TEA \# 03101100

Course \# 0390
Grade Placement: 11, 12
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II
Pre-AP Pre-Calculus 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-AP 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. PreAP Pre-Calculus connects algebra and trigonometry and establishes the foundation necessary for College Algebra, Calculus $A B$, and Calculus $B C$. The intentional rigor implemented in this course is to prepare student for dual credit, advanced placement (AP), and college level course work.

Grade Placement: 11
Credit: 1
Prerequisite: Algebra I; Geometry; Algebra II; Met South Texas College acceptance criteria
Pre-AP Pre-calculus 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-AP 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-AP Pre-Calculus connects algebra and trigonometry and establishes the foundation necessary for College Algebra, Calculus $A B$, and Calculus $B C$. The intentional rigor implemented in this course is to prepare student for dual credit, advanced placement (AP), and college level course work.
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

## 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 $A P$ Calculus $A B$ is the equivalent to that of a first-semester college calculus course. $A P C$ Calculus $A B$ 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 student for dual credit, advanced placement (AP) assessments, and college level course work. This course will follow the AP Calculus AB Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

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 $B C$ is an extension of $A P$ Calculus $A B$ 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 student for dual credit, advanced placement (AP) assessments, and college level course work. This course will follow the AP Calculus BC Advanced Placement requirements outlined in the AP College Board Course and Exam Description.


#### Abstract

AP Statistics TEA \# A3100200 Course \# 0922

\section*{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 course work to prepare them for the AP Statistics exam through College Board. The intentional rigor implemented in this course is to prepare student for dual credit, advanced placement (AP) assessments and college level course work. 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 \# 0922D
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.

## 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: Met 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 (CTE Program Course) TEA\# 13037600 Course \# 0913 <br> PLTW

Grade Placement: 10-12
Credit: 1
Prerequisite: Algebra I and Geometry
Digital Electronics is the study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discreet voltages or logic levels. This distinction allows for greater signal speed and storage capabilities and has revolutionized the world of electronics. Digital electronics is the foundation of modern electronic devices such as cellular phones, digital audio players, laptop computers, digital cameras, and high-definition televisions. The primary focus of Digital Electronics is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.
Note: This course has an application process in place. 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.

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 \& Chemistry
Integrated Physics \& Chemistry ESL
Pre-AP Integrated Physics \& Chemistry
Biology
Biology ESL
Pre-AP Biology
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
Pre-AP Chemistry
AP Chemistry
Chemistry I Dual Credit
Chemistry II Dual Credit
Organic Chemistry I Dual Credit
Physics


AP Physics 1
Physics Dual Credit
Environmental Systems
Environmental Science
AP Environmental Science
Anatomy \& Physiology (CTE Program Course)
Anatomy \& Physiology Honors (CTE Program Course)
Anatomy \& Physiology I Dual Credit
Anatomy \& Physiology II Dual Credit
Scientific Research \& Design (CTE Program Course)


SHARYLAND ADYaNCED ACADEMIC ACADEMY

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)

## 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 ESL TEA \# 03060201 <br> Course \# 0406

## Grade Placement: 9

Credit: 1
Prerequisite: LPAC Recommendation
In Integrated Physics and Chemistry ESL, 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. The teacher will implement Sheltered Instruction Observation Protocol (SIOP) strategies as part of the student's daily instruction to reinforce language acquisition and scientific functions and content.

## Pre - AP Integrated Physics and Chemistry <br> TEA \# 03060201 <br> Course \# 0400

## Grade Placement: 9

Credit: 1
Pre-AP 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. Pre-AP Integrated Physics and Chemistry 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 course work.

## Biology

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.

## Grade Placement: 9

## Credit: 1

Prerequisite: LPAC Recommendation
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. The teacher will implement Sheltered Instruction Observation Protocol (SIOP) strategies as part of the student's daily instruction to reinforce language acquisition and scientific functions and content. This course requires successful performance on the STAAR Biology End-of-Course assessment for graduation.

## Pre - AP Biology

TEA \# 03010200
Course \# 0408
Grade Placement: 9
Credit: 1
Pre-AP Biology 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 Pre-AP 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. Pre-AP Biology 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 Pre-AP Biology establishes the foundation necessary for all upper level sciences, advanced placement (AP) and college level science course work. 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 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; 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 student for dual credit, advanced placement (AP) assessments, and college level course work.

## Biology for Science Majors I Dual Credit

TEA \# 13037200
Course \# 0417D

## Grade Placement: 11-12

Credit: 1
Prerequisite: High school Biology and Chemistry; Met 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

## Grade Placement: 11-12

Credit: 1
Prerequisite: High school Biology and Chemistry; Met 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; Met 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; Met 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.

## Grade Placement: 10

## Credit: 1

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

## 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 course work.

## Chemistry I Dual Credit

TEA \# 13037210
Course \# 0419D
Grade Placement: 11-12
Credit: 1
Prerequisite: High school Biology and Chemistry; Met South Texas College acceptance criteria; a grade of a "C" or better in MATH 1414
STC CHEM 1411 General Chemistry I-This course will cover fundamental principles of chemistry for majors in the sciences, health sciences and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, property gasses, and an introduction to thermodynamics and descriptive chemistry. Basic laboratory experiments supporting theoretical principles presented in CHEM 1411 will be performed. Introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports will be emphasized.

## Chemistry II Dual Credit

TEA \# 13037210
Course \# 2419D

## Grade Placement: 11-12

Credit: 1
Prerequisite: High school Biology and Chemistry; Met South Texas College acceptance criteria; a grade of a " $C$ " or better in CHEM 1411
STC CHEM 1412 General Chemistry II - This course will cover chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Basic laboratory experiments supporting theoretical principles presented in CHEM 1412 will be performed. Introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports will be emphasized.

## Grade Placement: 11-12

Credit: 1
Prerequisite: High school Biology and Chemistry; Met South Texas College acceptance criteria; a grade of a " C " or better in CHEM 1412
STC CHEM 2423 Organic Chemistry I-Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Laboratory activities will reinforce fundamental principles presented in CHEM 2423 lecture. Methods for the purification and identification of organic compounds will be examined. This course is intended for students in science or pre-professional programs.

## 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.

## Pre - AP Physics

## Grade Placement: 11

Credit: 1
Prerequisite: Biology; Chemistry; 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 PreAP Physics 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 student for dual credit, advanced placement (AP), and college level course work.

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 student for dual credit, advanced placement (AP) assessments, and college level course work.

## Physics I Dual Credit

TEA \# 13037220
Course \# 0433D

## Grade Placement: 11, 12

Credit: 1
Prerequisite: High school Biology and Chemistry; Met South Texas College acceptance criteria; a grade of a "C" or better in MATH 1414 and MATH 1316 or completion of MATH 2412 with a grade of "C" or better
STC PHYS 1401 College Physics I - 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 student for dual credit, advanced placement (AP) assessments, and college level course work.

## Environmental Systems

Grade Placement: 11, 12
Credit: 1
In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources and flow of energy through an environmental system, relationship between carrying capacity and changes in populations and ecosystems, and changes in environments.

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, 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 student 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 second science credit; a course from the Health Science Career Cluster
Anatomy and Physiology is 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. 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 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.

## Anatomy and Physiology Honors

TEA \# 13020600
Course \# 0438
Grade Placement: 10-12
Credit: 1
Prerequisite: Biology and second science credit; TEA recommended course from the Health Science Career Cluster Anatomy and Physiology is 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 the Anatomy and Physiology, however, this course 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 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.

Grade Placement: 10-12
Credit: 1
Prerequisite: Biology and second science credit; Met South Texas College acceptance criteria STC BIOL 2401 Anatomy and Physiology I - This is a study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular and nervous systems. 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.

## Anatomy and Physiology II Dual Credit

TEA \# 13020600
Course \# 0439D
Grade Placement: 10-12
Credit: 1
Prerequisite: Biology and second science credit; Met South Texas College acceptance criteria; a grade of a "C" or better in BIOL 2402
STC BIOL 2402 Anatomy and Physiology II - This is a continuation of the study of the structure and function of the human body including the circulatory, respiratory, digestive, urinary, reproductive, and endocrine systems. Consideration is given to metabolism, electrolyte and fluid balance, and human development. 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.

## 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 science course sequence and can apply this course to their science graduation requirements.

## Scientific Research \& Design Honors TEA \# 13037200

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 science course sequence and can apply this course to their science graduation requirements.

## 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 \# $13020700 \quad$ 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; Met South Texas College acceptance criteria; a grade of a "C" or better in BIOL 1406, BIOL 1407 and CHEM 1411.
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.

## Grade Placement: 11-12

Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections \& Security 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.

Grade Placement: 11, 12
Credit: 1
Prerequisites: Biology; Chemistry
Recommended prerequisite or corequisite: Any Law, Public Safety, Corrections, and Security Career Cluster 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. Students are expected to work collaboratively as well as individually to reach specific course requirements. 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.

## Advanced Animal Science Honors

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

Credit: 1
Prerequisite: Algebra I and Biology Chemistry, Integrated Physics, 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 has an application process in place. 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
Pre-AP World Geography
World History
Pre-AP World History
AP World History
AP Human Geography
United States HistoryAP United States History
United States History Dual Credit
United States Government
United States Government Honors
AP United States Government and Politics
Federal Government Dual CreditTexas Government Dual Credit
Economics
Economics Honors
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
Social Studies Advanced Studies (First Time Taken)


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.

## 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.

## Pre-AP World Geography

TEA \# 03320100
Course \# 0300

## Grade Placement: 9

## Credit: 1

In Pre-AP World Geography, 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 course work.

## World History

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.

## Pre-AP World History

## Grade Placement: 10

Credit: 1
World History Studies 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 course work.

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 course work. 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 course work. 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.

## 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 course work. 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; Met 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

## 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.

## 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 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 course work. This course will follow the United States Government and Politics Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

Grade Placement: 11
Credit: 0.5
Prerequisite: High school World Geography or World History; Met 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\# 03330100
Course \# 2330D

## Grade Placement: 11

Credit: 0.5
Prerequisite: High school World Geography or World History; Met 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 inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.

## 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.

## 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 course work. This course will follow the AP Macroeconomics Advanced Placement requirements outlined in the AP College Board Course and Exam Description.

## Macroeconomics Dual Credit

## Grade Placement: 11, 12

## Credit: 1

Prerequisite: High school World Geography or World History; Met South Texas College acceptance criteria
STC ECON 2301 Principles of Economics I - Macro- This course 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.

## Grade Placement: 11, 12

## Credit: 0.5

Special Topics in Social Studies, an elective course, is a course where students are provided the opportunity to develop a greater understanding of the historic, political, economic, geographic, multicultural, and social forces that have shaped their lives and the world in which they live. Students will use social science knowledge and skills to engage in rational and logical analysis of complex problems using a variety of approaches, while recognizing and appreciating diverse human perspectives.

## Special Topics in Social Studies II

TEA \# 03380002
Course \# 0319
Grade Placement: 11, 12
Credit: 0.5
Special Topics in Social Studies, an elective course, is a course where students are provided the opportunity to develop a greater understanding of the historic, political, economic, geographic, multicultural, and social forces that have shaped their lives and the world in which they live. Students will use social science knowledge and skills to engage in rational and logical analysis of complex problems using a variety of approaches, while recognizing and appreciating diverse human perspectives.

## Personal Financial Literacy

## 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 <br> TEA \# 03350100 <br> Course \# 0399D

## Grade Placement: 10-12

Credit: 0.5
Prerequisite: Met South Texas College acceptance criteria
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: Met 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.

## Grade Placement: 10-12

## Credit: 0.5-1

In Social Studies Advanced Studies, an elective course, students conduct in-depth research, prepare a product of professional quality, and present their findings to appropriate audiences. Students, working independently or in collaboration with a mentor, investigate a problem, issue, or concern; research the topic using a variety of technologies; and present a product of professional quality to an appropriate audience.

## Languages Other Than English

Spanish I-E
Spanish I-S
Spanish II -E
Spanish II -S
Spanish III-E
Spanish III-S


AP Spanish Language and Culture
AP Spanish Literature and Culture
Spanish for Native/Heritage Speakers I Dual Credit
Spanish for Native/Heritage Speakers II Dual Credit
French I
French II

## French III

Pre-AP French III
AP French Language and Culture


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.

## 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 nonSpanish speakers only.

## Spanish I - S (Spanish speakers) <br> TEA \# 03440110 <br> 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 \# $03440300 \quad$ 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.

## 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 course work. 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 <br> TEA \# A3440200 <br> 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 freeresponse 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: Met 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.

## Grade Placement: 11-12

Credit: 1
Prerequisite: Met 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 for morphology and syntax. Students must have successfully completed French I prior to taking French II.

## French III <br> TEA \# 03410300 <br> 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.

Pre-AP French III
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 Pre-AP.

## 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
Theater/Drama Appreciation Dual Credit
Band I - IV
Applied Music I - II
Choir I - IV
Dance I - IV


Diamonds/ Diamond Belles I - IV
Folklorico I - IV
Mariachi I - IV
Floral Design


SHaRYLAND ADYaNCED aCADEMIC aCADEMY

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.

## 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 \# 03502210
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

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.

## 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 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

## 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.

## 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: Met South Texas College acceptance criteria
STCARTS 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 <br> 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 theatre. 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 theatre and the diversity of world cultures as expressed in theatre, 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 theatre. 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 (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 theatre, 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 will incorporate their understanding of heritage and traditions in theatre and the diversity of world cultures as expressed in theatre, 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 theatre. 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.

## Grade Placement: 10-12

Credit: 1
Prerequisite: Met South Texas College acceptance criteria
STC 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 I - IV

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, and develop organizational skills, engages in problem solving, and explores the properties and capabilities of various musical idioms.

## 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, and develop organizational skills, engages in problem solving, and explores the properties and capabilities of various musical idioms.

## 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, and develop organizational skills, engages in problem solving, and explores the properties and capabilities of various musical idioms.

## Dance I - IV <br> TEA \# PES00054 (I), 03830100 (II), 03830200 (III), 03830200 (IV) Course \# 0280 (I), 0281 (II), 0282 (III), 0283 (IV)

## 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 <br> TEA \# PES00054 (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 I - IV

TEA \# 03830100 (I), 03830200 (II), 03830300 (III), 03830400 (IV) Course \# 2254 (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.

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, and develop organizational skills, engages in problem solving, and explores the properties and capabilities of various musical idioms.

## 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

## Health Education

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


Cheerleading


Sharyland adyanced academic academy

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).

## 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 healthrelated 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 corner stone of this course and is exemplified by one of the course objectives-students designing their own personal fitness program.

## Team Sports <br> TEA \# PES00052 <br> Course \# T564

## 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 team work 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 \# PES00000
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 team work 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

## 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 tryout for the team each year. Through tryouts, the selection process allows for only a certain number of students to participate.

## Other Elective Courses

AP Research
AP Seminar


SHARYLAND ADYANCED ACADEMIC ACADEMY

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.

## Grade Placement: 10-12

## Credit: 1.0

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. The AP Seminar assessment consists of three parts: two performance tasks and the end-of-course AP Exam. All parts measure student achievement of the course learning objectives. Encourage your students to visit the AP Seminar student page for assessment information and practice.

## AP Research

## TEA \# N1100014

Course \# 0194

## Grade Placement: 10-12

Credit: 1.0
AP Research is an official AP course and is sanctioned by the College Board. The second course in the Capstone experience allows students to explore deeply an academic topic, problem, or issue of individual interest. Through this inquiry, students design, plan, conduct a year-long mentored, research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5000 words and a presentation, performance, or exhibition with an oral defense. There is no end-of-course written exam for AP Research. Instead, you'll be assessed on performance tasks you complete that are based on your yearlong research project: an academic paper (which you'll submit online for scoring through the AP Digital Portfolio), a presentation, and an oral defense of your research. These components all contribute to your final AP score on a scale of 1-5.


Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma ${ }^{\text {TM }}$.
Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate ${ }^{\text {TM }}$.

## 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 a 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 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 to 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

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.


Finance

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 ${ }^{\circledR}$ 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.


## Human

Services

The Human Services Career Cluster® focuses on preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care services, and consumer services.

## Information

 TechnologyThe Information Technology (IT) Career Cluster ${ }^{\circledR}$ focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.


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.


## Transportation,

Distribution
\& Logistics

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

## Career and Technical Student Organizations

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 and address important personal, family, work, and societal issues through 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,
entrepreneurs, bankers, international business leaders, teachers and premier professionals in many career fields.

## 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) is a national student organization with a mission to promote career opportunities in the health care 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 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 Association of Future Educators (TAFE) |
| :---: | :---: |

The Texas Association of Future Educators or TAFE (pronounced "taffy") is a co-curricular statewide student organization created to allow young men and women an opportunity to explore the teaching profession. The organization was created in 1984 to provide students in Texas with the necessary knowledge to make informed decisions about pursuing careers in education.


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 in 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
- Career Preparation I/Extended Career Preparation
- Career Preparation II
- Career Preparation II/Extended Career Preparation


## Career Preparation I

## TEA \# 12701300

## Course \# 0531 \& 2531

Grade Placement: 11-12
Credit: 2
Prerequisite: None
Career Preparation I 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 students to have paid employment. Employment site is typically selected by each individual student to ensure it correlates to their specific career interest area. Most employment sites are located out in our surrounding community.

## Career Preparation I/ Extended Career Preparation TEA \# 127013005 Course \# 0531 \& 2531

## 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 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 students to have paid employment. Employment site is typically selected by each individual student to ensure it correlates to their specific career interest area. Most employment sites are located out in our surrounding community.

## Career Preparation II

Grade Placement: 12
Credit: 2
Prerequisite: Career Preparation I
Career Preparation II develops essential knowledge and skills through advanced classroom instruction with business and industry employment experiences. Career Preparation II maintains relevance and rigor, supports student attainment of academic standards, and effectively prepares students for college and career success.
Note: This course requires students to have paid employment. Employment site is typically selected by each individual student to ensure it correlates to their specific career interest area. Most employment sites are located out in our surrounding community.

## 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 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 students to have paid employment. Employment site is typically selected by each individual student to ensure it correlates to their specific career interest area. Most employment sites are located out in our surrounding community.

## Agriculture, Food, and Natural Resources Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | MEETS GRAD REQ. |
| :---: | :---: | :---: | :---: | :---: |
| 0500 | Principles of Agriculture, Food, and Natural Resources | 1 | - | - |
| 0525 Honors | Advanced Animal Science | 1 | Yes | Science |
| 0516P | Advanced Energy and Natural Resource Technology | 1 | Yes | - |
| 0521P | Agribusiness Management and Marketing | 1 | Yes | - |
| 0508 | Agricultural Equipment Design and Fabrication | 1 | Yes | - |
| 0502 | Agricultural Mechanics and Metal Technologies | 1 | - | - |
| 0520 \& 2520 | Agricultural Power Systems | 2 | Yes | - |
| 0524P | Energy and Natural Resources Technology | 1 | Yes | - |
| 0509 | Equine Science | 0.5 | Yes | - |
| 0503 | Floral Design | 1 | - | Fine Arts |
| 0504 | Livestock Production | 1 | - | - |
| 0511 | Small Animal Management | 0.5 | Yes | - |
| 0519 | Wildlife, Fisheries and Ecology Management | 1 | - | - |
| 0176 | Professional Communications | 0.5 | - | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Agriculture, Food, and Natural Resources Course Flowchart



# Agriculture, Food, and Natural Resources Potential Certifications 

Students must meet specific criteria to qualify to test for these certifications.

```
Advanced Welding Society (AWS) D1.1
    via Richard Depue
(Offered within Welding Program Courses)
Advanced Welding Society (AWS) D9.1
    via Richard Depue
(Offered within Welding Program Courses)
Boater Safety
    via Texas Parks and Wildlife Department (TPWD)
(Offered within Wildlife Management Agriculture Course)
Elanco Fundamentals of Animal Science
    via CEV Multimedia
(Offered within Animal Systems Courses)
Hunter Safety
    via Texas Parks and Wildlife Department (TPWD)
(Offered within Wildlife Management Agriculture Course)
Occupational Safety and Health Administration (OSHA)
    via CareerSafe Online
(Offered within Agricultural Power System Course)
Principles of Floral Design
    via CEV Multimedia
(Offered within Floral Design Course)
Quality Counts
    via Texas Agrilife Extension
(Offered within Animal Systems Courses)
Texas Beef Quality Assurance
    via Texas Beef Council, Texas and SW Cattle Raisers Association, and Texas
    Agrilife Extension
(Offered within Animal Systems Courses)
```


## Agriculture, Food, and Natural Resources Courses

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

## Grade Placement: 9-12

Credit: 1
Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations.

## Advanced Animal Science Honors

## 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
Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.
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 Energy and Natural Resource Technology <br> TEA \# 13001200 <br> Course \# 0516P

Grade Placement: 11-12
Credit: 1
Recommended Prerequisites: A minimum of one credit from the courses in Agriculture, Food, and Natural Resource Career Cluster and Energy and Natural Resource Technology
Advanced Energy and Natural Resource Technology is designed to explore the interdependency of the public and natural resource systems related to energy production. In addition, renewable, sustainable, and environmentally friendly practices will be explored.
Note: This course requires teacher approval.

## Grade Placement: 10-12

Credit: 1
Agribusiness Management and Marketing 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 requires teacher approval.

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

## 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 metal working techniques. To prepare for careers in agricultural power, structural, and technical systems, students must attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the industry; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.

## Agricultural Power Systems <br> TEA \# 13002400 <br> Course \# 0520 \& 2520

Grade Placement: 10-12
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.

## Energy and Natural Resources Technology

Grade Placement: 10-12
Credit: 1
Recommended Prerequisites: Minimum one credit from the courses in Agriculture, Food, and Natural Resources Career Cluster
Energy and Natural Resource Technology examines the interrelatedness of environmental issues and production agriculture. Students will evaluate the environmental benefits provided by sustainable resources and green technologies. Instruction is designed to allow for the application of science and technology to measure environmental impacts resulting from production agriculture through field and laboratory experiences.
Note: This course requires teacher approval.

## Equine Science

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: 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.

## Livestock Production <br> TEA \# 13000300 <br> 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.

## Small Animal Management <br> TEA \# 13000400 <br> 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.

## Wildlife, Fisheries, and Ecology Management

## Grade Placement: 9-12

Credit: 1
Wildlife, Fisheries, and Ecology Management examines the management of game and non-game wildlife species, fish, and aqua crops and their ecological needs as related to current agricultural practices. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

## Architecture \& Construction Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | MEETS GRAD. REQ. |
| :---: | :---: | :---: | :---: | :---: |
| 0480 | Principles of Architecture | 1 | - | - |
| 0914 | Civil Engineering and Architecture (PLTW Engineering Program Course) | 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 | - |
| 0461 | Interior Design I | 1 | - | - |
| 0460 \& 2460 | Interior Design II | 2 | Yes | - |
| 0911 | Introduction to Engineering Design (PLTW Engineering Program Course) | 1 | - | - |
| 0797 \& 2797 | STC Architectural \& Engineering Design Technology Program | Various | Yes | - |
| 0176 | Professional Communications | 0.5 | - | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Architecture \& Construction Courses Flowchart



## Architecture \& Construction Potential Certification

## Students must meet specific criteria to qualify to test for this certification.

National Center for Construction Education and Research (NCCER) Core Level I via NCCER
(Offered within Construction Technology I \& II Courses)
Occupational Safety and Health Administration (OSHA)
via CareerSafe Online
(Offered within Interior Design II, Construction Technology II, \& Electrical Technology II Courses)

## Architecture \& Construction Courses


#### Abstract

Principles of Architecture and Construction TEA \# 13004210 Course \# 0480

\section*{Grade Placement: 9-12}

Credit: 1 Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management. Achieving proficiency in decision making and problem solving is an essential skill for career planning and lifelong learning. Students use self-knowledge, education, and career information to set and achieve realistic career and educational goals. Job-specific training can be provided through training modules that identify career goals in trade and industry areas. Classroom studies include topics such as safety, work ethics, communication, information technology applications, systems, health, environment, leadership, teamwork, ethical and legal responsibility, employability, and career development and include skills such as problem solving, critical thinking, and reading technical drawings.


## Civil Engineering and Architecture <br> TEA \# N1303747 <br> Course \# 0914

## Grade Placement: 10-12

Credit: 1
Prerequisite: Introduction to Engineering Design
Students learn important aspects of building and site design and development, applying math, science, and standard engineering practices to design both residential and commercial projects. They document designs using 3D architecture design software. Some students have seen these designs come to life through partnerships with local housing organizations.
Note: This course has an application process in place.

## 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

## 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

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 <br> TEA \# 13005700 <br> Course \# 0486, 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.

## Interior Design I

TEA \# 13004300
Course \# 0461
Grade Placement: 10-12
Credit: 1
Prerequisites: Algebra I and English I
Recommended Prerequisites: Principles of Architecture
Interior Design I is a technical course that addresses psychological, physiological, and sociological needs of individuals by enhancing the environments in which they live and work. Students will use knowledge and skills related to interior and exterior environments, construction, and furnishings to make wise consumer decisions, increase productivity, promote sustainability, and compete in industry.

## Interior Design II

Grade Placement: 11-12
Credit: 2
Prerequisites: English II, Geometry, and Interior Design I
Interior Design II is a technical laboratory course that includes the application of the employability characteristics, principles, processes, technologies, communication, tools, equipment, and materials related to interior design to meet industry standards.

## Introduction to Engineering Design TEA \# N1303742

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.
Note: This course has an application process in place.

## STC Computer Aided Drafting and Design Program TEA \# 13004400 Course \# 0797, 2797

## Grade Placement: 11-12

Credits: 1 per course
Prerequisite: South Texas College acceptance criteria
The Architectural \& Engineering Design Technology degree is designed to provide a pathway to the fields of architectural, visual, and civil engineering technologies and to assist students in preparing architectural and structural construction documents, such as: residential projects, schools, office spaces, and commercial/industrial buildings. In addition, the students develop skills in the production of presentational free-hand drawings, working/ study models, and various computer generated graphics. These means allow students to utilize specialized CAD software in solving design challenges both technically and graphically.
Since the courses under this program are taught by college instructors at the South Texas College Technology Campus, bus transportation will be provided. When courses are offered $1^{\text {st }}$ block, the bus will leave from the high school at 7:30 a.m. therefore, students must be able to commit to arriving early at school in order to board the bus. Personal transportation is allowed pending pre-approval and will be contingent upon obtaining a parking permit from the student's home campus and STC. Course offerings are dependent on the availability of STC staff, and specific courses will only be offered if the minimum enrollment requirements are met. See your counselor for more detailed information regarding this off-campus program.

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

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | $\begin{aligned} & \text { MEETS } \\ & \text { GRAD. REQ. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 0691 | Principles of Arts, Audio/Video Technology, and Communications | 1 | - | - |
| 0692 | Animation I | 1 | Yes | - |
| 0687 | Audio/Video Production I | 1 | Yes | - |
| 0699P (SHS) | Audio/Video Production II | 1 | Yes | - |
| 0699 \& 2699 (PHS) | Audio/Video Production II \& Lab | 2 | Yes | - |
| 0689 | Commercial Photography I | 1 | - | - |
| 0459 | Fashion Design I | 1 | - | - |
| 0458 \& 2458 | Fashion Design II \& Lab | 2 | Yes | - |
| 0915 | Graphic Design and Illustration I | 1 | Yes | - |
| 0176 | Professional Communications | 0.5 | - | - |
| 0178 | STC Introduction to Speech Communications 1311 | 0.5 | - | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Arts, A/V Technology \& Communications Course Flowchart



## Arts, A/V Technology \& Communications Potential Certifications

Students must meet specific criteria to qualify to test for these certifications.

Adobe Certified Associate (ACA) via Certiport Inc.

- Animate,
- Dreamweaver,
- Flash,
- Illustrator,
- InDesign,
- Photoshop, and
- Premier Pro
(May be offered within various Graphic Design Courses)
Occupational Safety and Health Administration (OSHA)
via CareerSafe Online
(Offered within A/V Production II \& Fashion Design II Courses)


## Arts, A/V Technology \& Communications Courses

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

## Grade Placement: 9-12 <br> Credit: 1

The goal of this course is for the student understands 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.
Animation I
TEA \# 13008300
Course \# 0692

## Grade Placement: 10-12

Credits: 1
Recommended Prerequisite: Art / or Principles of Art, 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 history and techniques of the animation industry.

## Audio/Video Production I

TEA \# 13008500
Course \# 0687

## Grade Placement: 9-12

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

TEA \# 13008600
Course \# 0699P

## Grade Placement: 10-12

Credits: 1
Prerequisite: Audio/Video Production I
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. This course may be implemented in an audio format or a format with both audio and video.

## Grade Placement: 10-12

Credits: 2
Prerequisite: Audio/Video Production I
Corequisite: Audio/Video Production I/
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: 9-12

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.

## Fashion Design I

TEA \# 13009300
Course \# 0459

## Grade Placement: 10-12

Credits: 1
Recommended Prerequisite: Principles of Arts, Audio/Video Technology, and Communications
Within this context, 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 fashion industry with an emphasis on design and construction.

## Fashion Design II \& Lab

TEA \# 13009410
Course \# 0458 \& 2458
Grade Placement: 11-12
Credits: 2
Prerequisite: Fashion Design I
Corequisite: Fashion Design I/
Careers in fashion span all aspects of the textile and apparel industries. Within this context, 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 fashion industry with an emphasis on design and construction.

## Graphic Design and Illustration I

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.

## 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.
Note: This course meets the Sharyland ISD district-required speech credit.

## STC Professional Communications Dual Credit <br> TEA \# 13009900 <br> Course \# 0178D

## Grade Placement: 11-12

Credit: 0.5 (Meets District Required Speech Credit)
Prerequisite: South Texas College acceptance criteria
STC SPCH 1311 Introduction to Speech Communication - This is a dual credit course giving students the opportunity to obtain a Professional Communications high school credit and a South Texas College (STC) SPCH 1311 Introduction to Speech Communication college credit. The STC Introduction to Speech Communication course introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking.
Note: This course meets the Sharyland ISD district-required speech credit.

## Business Management \& Administration/ Finance Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | MEETS GRAD REQ. |
| :---: | :---: | :---: | :---: | :---: |
| 0534 | Principles of Business, Marketing, and Finance | 1 | - | - |
| 0536 | Accounting I | 1 | Yes | - |
| 0535 | Accounting II Honors | 1 | Yes | Math |
| 0542P | Banking and Financial Services | 0.5 | Yes | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0550 | Business Information Management II | 1 | Yes | - |
| 0544 | Business Law | 1 | Yes | - |
| 0537 | Business Management | 1 | - | - |
| 0538P | Entrepreneurship | 1 | Yes | - |
| 0541 | Global Business | 0.5 | - | - |
| 0545 | Human Resources Management | 0.5 | - | - |
| 0546P | Money Matters | 1 | Yes | - |
| 0501P | Touch System Data Entry | 0.5 | Yes | - |
| 0995 | STC Introduction to Computing 1301 | 0.5 | Yes | - |
| TBD | STC Dual Enrollment Business Administration Academy (DEBAA) | Various | - | - |
| 0176 | Professional Communications | 0.5 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Business Management \& Administration/Finance Course Flowchart



## Business Management \& Administration/Finance Potential Certifications

Students must meet specific criteria to qualify to test for these certifications.

Microsoft Office Specialist (MOS) via Certiport Inc.

- Powerpoint,
- Word,
- Excel, and
- Access
(Offered within BUSIM I \& II Courses)
Microsoft Office Specialist (MOS) - Expert via Certiport Inc.
- Word, and
- Excel
(Offered within BUSIM I \& II Courses)

Occupational Safety and Health Administration (OSHA)
via CareerSafe Online
(Offered within Human Resource Management Course)

## Business Management \& Administration/Finance Courses

## 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.

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

## 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.

## Banking and Financial Services

## Grade Placement: 10-12

Credit: 0.5
Recommended Prerequisite: Principles of Business, Marketing, and Finance
In Banking and Financial Services, students will develop knowledge and skills in the economic, financial, technological, international, social, and ethical aspects of banking to become competent employees and entrepreneurs. Students will incorporate a broad base of knowledge that includes the operations, sales, and management of banking institutions to gain a complete understanding of how banks function within society.

## Note: This course requires teacher approval.

## Business Information Management I TEA \# 13011400

## 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 wordprocessing 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: 10-12

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.

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

## 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 \# 0538P

## 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.
Note: This course requires teacher approval.

## Global Business

Grade Placement: 10-12

## 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.

## Money Matters

TEA \# 13016200
Course \# 0546P

## Grade Placement: 9-12

Credit: 1
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 allocating, risk management, retirement planning, and estate planning.
Note: This course requires teacher approval.

## Grade Placement: 9-12

## Credit 0.5

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

## STC Introduction to Computing Dual Credit

## TEA \# 13011500

Course \# 0995

## Grade Placement: 11-12

Credit: 0.5 (Meets District Required Technology Applications Credit)
Prerequisite: 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.
Note: This course meets the Sharyland ISD district-required Technology Applications credit.

## STC Dual Enrollment Business Administration Academy (DEBAA)

Course \# TBD
Grade Placement: 11-12
Credit: 1 per course
Prerequisite: South Texas College acceptance criteria; 2-Year Commitment
This South Texas College (STC) Dual Enrollment Business Administration Academy (DEBAA) is a two year-round dual enrollment program developed for high school students who are seriously interested in pursuing careers in Business Administration. This academy encourages students to consider a Business Administration 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 (AS) degree in Business Administration by the end of their senior year in high school. Contact your school Counselor for more information on how to enroll into this program. Note: This course has an application process in place.

## Education \& Training Courses at a Glance

| LOCAL <br> COURSE $\#$ | COURSE NAME | CREDIT | ADVANCED <br> COURSE | MEETS <br> GRAD REQ. |
| :---: | :--- | :---: | :---: | :---: |
| 0453 | Principles of Education and Training | 1 | - | - |
| 0439 (CP) <br> 0438 (Honors) | Anatomy and Physiology | 1 | Yes | Science |
| 0454 | Child Development | 1 | - | - |
| 0455 | Dollars and Sense | 0.5 | Yes | - |
| 0464 | Family and Community Services | 1 | - | - |
| $0556 \& 2556$ | Instructional Practices | 2 | Yes | - |
| 0452 | Interpersonal Studies | 0.5 | Yes | - |
| $0554 \& 2554$ | Practicum in Education and Training | 2 | Yes | - |
| 0176 | Professional Communications | - |  |  |
| 0532 | Business Information Management I | 0.5 | - | - |
| $0531 \& 2531$ | Career Preparation I | 1 | - | - |
| $3531 \& 5531$ | Career Preparation II | $2-3$ | Yes | - |

## Education \& Training Course Flowchart



## Education \& Training Potential Certifications

Students must meet specific criteria to qualify to test for these certifications.

Heartsaver CPR/Automated External Defibrillator (AED)/First Aid
via CPR Services (American Heart Association)
(Offered within Education and Training Courses)

Occupational Safety and Health Administration (OSHA)
via CareerSafe Online
(Offered within Instructional Practices \& Practicum in Education and Training Courses)

## Substitute Teacher Certification

via University of Texas Rio Grande Valley
(Offered within Instructional Practices \& Practicum in Education and Training Courses)

## Education \& Training Courses

## Principles of Education and Training TEA \# 13014200 <br> 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.

## 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 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.

## Child Development

Grade Placement: 10-12

## Credit: 1

## Recommended Prerequisite: Principles of Human Services

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

## Dollars and Sense

TEA \# 13014300
Course \# 0455

## Grade Placement: 11-12

## Credit: . 5

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

## Family and Community Services <br> TEA \# 13014900 <br> Course \# 0464

Grade Placement: 10-12
Credit: 1
Recommended Prerequisite: Principles of Human Services
Family and Community Services is a laboratory-based course designed to involve students in realistic and meaningful community-based activities through direct service or service- learning experiences. Students are provided opportunities to interact with and provide services to individuals, families, and the community through community or volunteer services. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics.

## 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 has an application process in place.

## Grade Placement: 9-12

Credit: . 5
Recommended Prerequisite: Principles of Human Services, Principles of Health Science, or Principles of Education and Training
Interpersonal Studies examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

## 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 has an application process in place.

## Health Science Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | MEETS GRAD REQ. |
| :---: | :---: | :---: | :---: | :---: |
| 0900 | Principles of Health Science | 1 | - | - |
| $\begin{gathered} 0439 \text { (CP) } \\ 0438 \text { (Honors) } \end{gathered}$ | Anatomy and Physiology | 1 | Yes | Science |
| 0903 \& 2903 | Health Science Theory/Health Science Clinical <br> (Clinical Rotation Program) | 2 | Yes | - |
| 0907 (CP) 0909 (Honors) | Medical Microbiology | 1 | Yes | Science |
| 0901 | Medical Terminology | 1 | - | - |
| 0916 \& 2916 | Practicum in Health Science (Medical Billing \& Coding Program) | 2 | Yes | - |
| 0904 \& 2904 | Practicum in Health Science (Pharmacy Technician Program) | 2 | Yes | - |
| 1008 \& 2008 | STC Dual Enrollment Medical Science Academy (DEMSA) | Various | - | - |
| TBD | STC Emergency Medical Technician (EMT) Program | Various | Yes | - |
| 0454 | Child Development | 1 | - | - |
| 0456 | Lifetime Nutrition and Wellness | 0.5 | Yes | - |
| 0176 | Professional Communications | 0.5 | - | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Health Science Course Flowchart



## Health Science Potential Certifications

Students must meet specific criteria to qualify to test for these certifications.

| Basic Life Support (BLS) (at SHS)/ CPR (at PHS) <br> via CPR Services <br> (Offered within Clinical Rotations Program) |
| :--- |
| Certified Clinical Medical Assistant (CCMA) <br> via National Healthcareer Association <br> (Offered within Clinical Rotations Program) |
| National Certified Insurance \& Coding Specialist (NCICS) <br> via National Center For Competency Testing (NCCT) <br> (Offered within Medical Billing and Coding Program) |
| National Sterile Products IV (Intravenous) Certification |
| via Kaduceus Holdings Inc. |
| (Offered within Pharmacy Technician Program) |
| Occupational Safety and Health Administration (OSHA) <br> via CareerSafe Online |
| (Offered within Clinical Rotations, Medical Billing and Coding \& Pharmacy Technician |
| Programs) |

## Health Science Courses

Principles of Health Science
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 health care industry.

## Anatomy and Physiology <br> TEA \# 13020600 <br> 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 <br> TEA \# 13020600 <br> 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 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.

Grade Placement: 10-12
Credit: 1
Recommended Prerequisite: Principles of Human Services
Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

## Health Science Theory/Health Science Clinical TEA \# 13020410 <br> Course \# 0903 \& 2903 Clinical Rotations Program

## Grade Placement: 11-12

Credits: 2
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 has an application process in place.

## Lifetime Nutrition and Wellness <br> TEA \# 13024500 <br> Course \# 0456

Grade Placement: 11-12
Credit: 0.5
Prerequisite: None
Recommended Prerequisite: Principles of Human Services or Principle of Health Science
Lifetime Nutrition and Wellness is a laboratory course that allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences.

## 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 nonpathogenic 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

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 nonpathogenic 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: 9-12

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.

## Practicum in Health Science

 TEA \# 13020510
## Grade Placement: 11-12

Credits: 2
Prerequisites: Biology; Principles of Health Science; and Medical Terminology Recommended Prerequisites: Anatomy \& Physiology
This course is designed to equip students with the knowledge, technical skills, and work habits required for an entry-level position in the medical insurance billing and coding field by offering problem-solving exercises by utilizing real-world scenarios. This course places a strong emphasis on ethics, accountability, professionalism, and the individuals' commitment to the pursuit of lifelong personal, educational and professional development, as it relates to the medical insurance billing and coding field.
Note: This course has an application process in place.

# Practicum in Health Science TEA \# 13020500 

## Pharmacy Technician Program

## Grade Placement: 12

## Credits: 2

Prerequisite: Biology; Chemistry; Principles of Health Science; Medical Terminology; and "B" or better in Algebra II or Pre-Calculus
This course is designed to equip students with knowledge, technical skills, and work habits required for an entry-level position in the pharmacy field or related area. 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 has an application process in place.

## STC Dual Enrollment Medical Science Academy (DEMSA)

## Grade Placement: 11-12

## Credit: 1 per course

Prerequisite: 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 course-work 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 course has an application process in place.

## South Texas College Emergency Medical Technician Program

## Course \# TBD

## Grade Placement: 12 <br> Credits: Various

Prerequisite: Biology; Chemistry; Principles of Health Science; Medical Terminology; and " $B$ " or better in Algebra II or Pre-Calculus
The South Texas College (STC) Emergency Medical Technician (EMT) program prepares students to deliver out-of-hospital emergency care at the scene of an accident or a medical emergency. EMTs typically work at 911 ambulance companies, flight paramedics, emergency rooms, transport teams, and fire departments. Contact your school Counselor for more information on how to enroll into this program.
Note: This course has an application process in place.

## Human Services Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | MEETS GRAD REQ. |
| :---: | :---: | :---: | :---: | :---: |
| 0450 | Principles of Human Services | 1 | - | - |
| 0454 | Child Development | 1 | - | - |
| 0455 | Dollars and Sense | 0.5 | Yes | - |
| 0464 | Family and Community Services | 1 | - | - |
| 0452 | Interpersonal Studies | 0.5 | Yes | - |
| 0456 | Lifetime Nutrition and Wellness | 0.5 | Yes | - |
| $\begin{gathered} 0439 \text { (CP) } \\ 0438 \text { (Honors) } \end{gathered}$ | Anatomy and Physiology | 1 | Yes | Science |
| 0176 | Professional Communications | 0.5 | - | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Human Services Course Flowchart



## Human Services Potential Certifications

Students must meet specific criteria to qualify to test for this certification.

| Food Handlers Certification <br> via Safeway Certifications <br> (Offered within Lifetime Nutrition and Wellness Course) |
| :--- |
| W!SE (Working in Support of Education) Financial Literacy Certification <br> via Wise-NY.org <br> (May be offered within Lifetime Nutrition and Wellness Course) |

## Human Services Courses

## Principles of Human Services

TEA \# 13024200
Course \# 0450

## Grade Placement: 9-12

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

## Anatomy and Physiology <br> TEA \# 13020600 <br> 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 \# $13020600 \quad$ 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 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.

## Child Development

Grade Placement: 10-12
Credit: 1
Recommended Prerequisite: Principles of Human Services
Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

Dollars and Sense
TEA \# 13024300
Course \# 0455
Grade Placement: 11-12
Credit: . 5
Recommended Prerequisite: Principles of Human Services
Dollars and Sense focuses on consumer practices and responsibilities, money-management processes, decision-making skills, impact of technology, and preparation for human services careers.

## Family and Community Services <br> TEA \# 13024900 <br> Course \# 0464

## Grade Placement: 10-12

Credit: 1
Recommended Prerequisite: Principles of Human Services
Family and Community Services is a laboratory-based course designed to involve students in realistic and meaningful community-based activities through direct service or service- learning experiences. Students are provided opportunities to interact with and provide services to individuals, families, and the community through community or volunteer services. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics.

## Interpersonal Studies

## Grade Placement: 9-12

Credit: . 5
Recommended Prerequisite: Principles of Human Services, Principles of Health Science, or Principles of Education and Training
Interpersonal Studies examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

## Lifetime Nutrition and Wellness

## Grade Placement: 11-12

## Credit: 0.5

Recommended Prerequisite: Principles of Human Services or Principle of Health Science
Lifetime Nutrition and Wellness is a laboratory course that allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences.

## Information Technology Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | $\begin{aligned} & \text { MEETS } \\ & \text { GRAD REQ. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 0560 | Principles of Information Technology | 1 | - | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0550 | Business Information Management II | 1 | Yes | - |
| 0448 | Computer Programming I | 1 | Yes | - |
| 0540 | Digital Media | 1 | - | - |
| 0553 | Web Technologies | 1 | - | - |
| 1013 \& 2013 | STC Computer \& Internet Specialis $\dagger$ Certificate Program | Various | Yes | - |
| 1014 \& 2014 | STC Dual Enrollment Computer Science Academy (DECSA) | Various | - | - |
| 0176 | Professional Communications | 0.5 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Information Technology Course Flowchart



## Information Technology Courses

## Principles of Information Technology TEA \# $13027200 \quad$ Course \# 0560

Grade Placement: 9-12
Credit: 1
In Principles of Information Technology, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

## 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 wordprocessing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

## Business Information Management II TEA \# $13011500 \quad$ Course \# 0550

Grade Placement: 10-12
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.

## Computer Programming I

TEA \# 13027600
Course \# 0448

## Grade Placement: 10-12

## Credit: 1

Recommended Prerequisites: Principles of Information Technology and Algebra I
In Computer Programming I, students will acquire knowledge of structured programming techniques and concepts appropriate to developing executable programs and creating appropriate documentation. Students will analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as related to computer programming. Students will apply technical skills to address business applications of emerging technologies.

## Grade Placement: 9-12

Credit: 1
In Digital Media, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students will enhance reading, writing, computing, communication, and critical thinking and apply them to the IT environment.

## Web Technologies

Grade Placement: 10-12
Credit: 1
Recommended Prerequisite: Principles of Information Technologies
In Web Technologies, students will learn to make informed decisions and apply the decisions to the field of IT. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students will enhance reading, writing, computing, communication, and critical thinking and apply them to the IT environment.

## STC Computer \& Internet Specialist Certificate Program

Grade Placement: 11-12
Credits: 1 per course

## Prerequisite: South Texas College acceptance criteria

The STC Computer \& Internet Specialist certificate will provide students with the foundation technical skills required in the use of computers and the Internet. Students will learn entry-level skills needed to effectively use the latest computer and Internet technologies in a business environment. Graduates will have knowledge in the areas of technology including computer hardware, software, operating systems, networking, basic word processing applications, presentation media, Internet and electronic mail. Many of our graduates apply the credits earned in the Computer and Internet Specialist certificate degree to the Computer Maintenance Specialist certificate and Computer Maintenance Technology Associate of Applied Sciences degrees. Contact your school Counselor for more information on how to enroll into this program. Since the courses under this program are taught by college instructors at the South Texas College Technology Campus, bus transportation will be provided. When courses are offered $1^{\text {st }}$ block, the bus will leave from the high school at 7:30 a.m. therefore, students must be able to commit to arriving early at school in order to board the bus. Personal transportation is allowed pending pre-approval and will be contingent upon obtaining a parking permit from the student's home campus and STC. Course offerings are dependent on the availability of STC staff, and specific courses will only be offered if the minimum enrollment requirements are met. See your counselor for more detailed information regarding this off-campus program.

## Credit: 1 per course

Prerequisite: South Texas College acceptance criteria; 2-Year Commitment
This South Texas College (STC) Dual Enrollment Computer Science Academy (DECSA) is a two year-round dual enrollment program developed for high school juniors and seniors who are seriously interested in pursuing a career in computers. The purpose of this academy is to increase the number of rural area students committed to careers and service in computer programming, design and computer high-tech fields. This academy is designed to encourage area high school students into the computer science professions by providing college course-work and computer related opportunities that will motivate, educate, and prepare students for higher education in the field of computer science. With the support of the local industry providers, the Dual Enrollment Computer Science Academy (DECSA) will promote and participate in efforts that will reinforce the schools' and communities' commitment to prepare students for careers in computer science, with emphasis on programming and the new field of Medical Electronic Records. Contact your school Counselor for more information on how to enroll into this program.
Note: This course has an application process in place.

## Law, Public Safety, Corrections \& Security Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | MEETS GRAD REQ. |
| :---: | :---: | :---: | :---: | :---: |
| 0339 | Principles of Law, Public Safety, Corrections, and Security | 1 | - | - |
| 0337P | Correctional Services | 1 | Yes | - |
| 0926P | Court Systems and Practices | 1 | Yes | - |
| 0932P | Criminal Investigation | 1 | Yes | - |
| $\begin{gathered} 0906 \text { (CP) } \\ 0910 \text { (Honors) } \\ \hline \end{gathered}$ | Forensic Science | 1 | Yes | Science |
| 0338 | Law Enforcement I | 1 | - | - |
| 0555 | Law Enforcement II | 1 | Yes | - |
| 0557 \& 2557 | Practicum in Law, Public Safety, Corrections, and Security | 2 | Yes | - |
| 1015 \& 2015 | STC Dual Enrollment Criminal Justice Academy (DECJA) | Various | - | - |
| 0176 | Professional Communications | 0.5 | - | - |
| 0532 | Business Information Management I | 1 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Law, Public Safety, Corrections \& Security Course Flowchart



## Law, Public Safety, Corrections \& Security Potential Certifications

## Students must meet specific criteria to qualify to test for these certifications.

Federal Aviation Administration (FAA) Part 107 Certificationvia Federal Aviation Administration(Offered within Practicum in Law and Public Safety, Corrections, and Security Course)National Emergency Communications Certification 9-1-1 (NECC)
via Professional Pride Inc.(Offered within Practicum in Law and Public Safety, Corrections, and Security Course)
Occupational Safety and Health Administration (OSHA) via CareerSafe Online (Offered within Practicum in Law and Public Safety, Corrections, and Security Course)

# Law, Public Safety, Corrections, and Security Courses 

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.

## Correctional Services

Grade Placement: 10-12
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.
Note: This course requires teacher approval.

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 requires teacher approval.

## Criminal Investigation

TEA \# 13029550
Course \# 0932P
Grade Placement: 10-12
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.
Note: This course requires teacher approval.

# Grade Placement: 11-12 <br> Credit: 1 <br> Prerequisites: Biology and Chemistry <br> Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections \& Security 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. <br> 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. 

Grade Placement: 11-12
Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections \& Security 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.

Grade Placement: 10-12
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.

## Practicum in Law, Public Safety, Corrections and Security

Grade Placement: 12
Credits: 2
Prerequisite: At Least Two Other Credits from this Career Pathway
The practicum course is designed to give students supervised practical application of previously studied knowledge and skills in law, public safety, corrections, and security. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
Note: This course has an application process in place.

## STC Dual Enrollment Criminal Justice Academy (DECJA)

Course \# 1015 \& 2015
Grade Placement: 11-12
Credit: 1 per course
Prerequisite: 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 Courses at a Glance

| LOCAL COURSE \# | COURSE NAME | CREDIT | ADVANCED COURSE | MEETS GRAD REQ. |
| :---: | :---: | :---: | :---: | :---: |
| 0918P | AC/DC Electronics | 1 | Yes | - |
| 0914 | Civil Engineering and Architecture (PLTW Engineering Program Course) | 1 | - | - |
| 0913 (Honors) | Digital Electronics (PLTW Engineering Program Course) | 1 | Yes | Math |
| 0912 (Honors) | Engineering Science <br> (PLTW Engineering Program Course) | 1 | Yes | Science |
| 0911 | Introduction to Engineering Design (PLTW Engineering Program Course) | 1 | - | - |
| 0930P | Robotics I | 1 | Yes | - |
| $\begin{gathered} 0446 \text { (CP) } \\ 0441 \text { (Honors) } \end{gathered}$ | Scientific Research and Design | 1 | Yes | Science |
| 0919P | Solid State Electronics | 1 | Yes | - |
| 0797 \& 2797 | STC Architectural \& Engineering Design Technology Program | Various | Yes | - |
| 1006 \& 2006 | STC Dual Enrollment Engineering Academy (DEEA) | Various | - | - |
| 0525 Honors | Advanced Animal Science | 1 | Yes | Science |
| $\begin{gathered} 0439 \text { (CP) } \\ 0438 \text { (Honors) } \\ \hline \end{gathered}$ | Anatomy and Physiology | 1 | Yes | Science |
| 0532 | Business Information Management I | 1 | - | - |
| 0550 | Business Information Management II | 1 | Yes | - |
| 0448 | Computer Programming I | 1 | Yes | - |
| $\begin{gathered} 0906 \text { (CP) } \\ 0910 \text { (Honors) } \end{gathered}$ | Forensic Science | 1 | Yes | Science |
| $\begin{gathered} 0907 \text { (CP) } \\ 0909 \text { (Honors) } \end{gathered}$ | Medical Microbiology | 1 | Yes | Science |
| 0176 | Professional Communications | 0.5 | - | - |
| 0531 \& 2531 | Career Preparation I | 2-3 | Yes | - |
| 3531 \& 5531 | Career Preparation II | 2-3 | Yes | - |

## Science, Technology, Engineering \& Mathematics Course Flowchart



## Science, Technology, Engineering \& Mathematics Potential Certifications

Students must meet specific criteria to qualify to test for these certifications.

```
Autodesk Certified User (ACU) - Inventor, and Revit
    via Certiport Inc.
(May be offered within PLTW Engineering Courses)
Occupational Safety and Health Administration (OSHA)
    via CareerSafe Online
(Offered within Digital Electronics Course)
```


## Science, Technology, Engineering, \& Mathematics Courses

Introduction to 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.
Note: This course has an application process in place.

AC/DC Electronics
TEA \# 13036800
Course \# 0918P
Grade Placement: 10-12
Credit: 1
AC/DC Electronics focuses on the basic electricity principles of alternating current/direct current (AC/DC) circuits. Students will demonstrate knowledge and applications of circuits, electronic measurement, and electronic implementation. Through use of the design process, students will transfer academic skills to component designs in a project-based environment. Students will use a variety of computer hardware and software applications to complete assignments and projects. Additionally, students will explore career opportunities, employer expectations, and educational needs in the electronics industry.
Note: This course requires teacher approval.

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

## 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 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.

## Business Information Management <br> TEA \# 13020600 <br> 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 wordprocessing 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: 10-12
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.

## Civil Engineering and Architecture

PLTW Engineering Program Course
Grade Placement: 10-12
Credit: 1
Prerequisite: Introduction to Engineering Design
Students learn important aspects of building and site design and development, applying math, science, and standard engineering practices to design both residential and commercial projects. They document designs using 3D architecture design software. Some students have seen these designs come to life through partnerships with local housing organizations.
Note: This course has an application process in place.

Computer Programming I
TEA \# 13027600
Course \# 0448
Grade Placement: 10-12
Credit: 1
Recommended Prerequisites: Principles of Information Technology and Algebra I
In Computer Programming I, students will acquire knowledge of structured programming techniques and concepts appropriate to developing executable programs and creating appropriate documentation. Students will analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as related to computer programming. Students will apply technical skills to address business applications of emerging technologies.

## Digital Electronics Honors <br> TEA \# 13037600 <br> Course \# 0913 <br> PLTW Engineering Program Course

Grade Placement: 10-12
Credit: 1
Prerequisite: Algebra I and Geometry
Digital Electronics is the study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discreet voltages or logic levels. This distinction allows for greater signal speed and storage capabilities and has revolutionized the world of electronics. Digital electronics is the foundation of modern electronic devices such as cellular phones, digital audio players, laptop computers, digital cameras, and high-definition televisions. The primary focus of Digital Electronics is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.
Note: This course has an application process in place. 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.

```
Engineering Science Honors
TEA # 13037500

Grade Placement: 10-12
Credit: 1
Prerequisite: Algebra I and Biology Chemistry, Integrated Physics, 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 problemsolving 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 has an application process in place. 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.

\section*{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 \& Security 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.

\section*{Grade Placement: 11-12}

Credit: 1
Prerequisites: Biology and Chemistry
Recommended Prerequisite or Corequisite: Any Law, Public Safety, Corrections \& Security 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.

\section*{Medical Microbiology}

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 nonpathogenic 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.

\section*{Medical Microbiology Honors}

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 nonpathogenic 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.

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 requires teacher approval.

\section*{Scientific Research and Design}

TEA \# 13037200

\section*{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 science course sequence and can apply this course to their science graduation requirements.

\section*{Scientific Research and Design Honors}

Grade Placement: 11-12
Credit: 1
Prerequisite: Biology, Chemistry, Integrated Physics and Chemistry (IPC), or Physics
This course covers the same concepts as Scientific Research and Design. The content is studied in greater depth and may include additional topics. This course is highly recommended for students interested in pursuing a career in science, technology, engineering, and mathematics (STEM) occupations. Students must meet the \(40 \%\) laboratory and fieldwork requirement.
Note: This course satisfies a science credit requirement for students on the Foundation High School Program.

Grade Placement: 10-12
Credit: 1
In Solid State Electronics, students will demonstrate knowledge and applications of advanced circuits, electrical measurement, and electrical implementation used in the electronics and computer industries. Students will transfer advanced academic skills to apply engineering principles and technical skills to troubleshoot, repair, and modify electronic components, equipment, and power electronic systems in a project-based environment. Additionally, students will explore career opportunities, employer expectations, and educational needs in the electronics industry. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
Note: This course requires teacher approval.

\section*{STC Architectural \& Engineering Design Technology TEA \# 13004400 Course \# 1006 \& 2006}

Grade Placement: 11-12
Credits: 1 per course
Prerequisite: South Texas College acceptance criteria
The Architectural \& Engineering Design Technology degree is designed to provide a pathway to the fields of architectural, visual, and civil engineering technologies and to assist students in preparing architectural and structural construction documents, such as: residential projects, schools, office spaces, and commercial/industrial buildings. In addition, the students develop skills in the production of presentational free-hand drawings, working/ study models, and various computer generated graphics. These means allow students to utilize specialized CAD software in solving design challenges both technically and graphically.
Since the courses under this program are taught by college instructors at the South Texas College Technology Campus, bus transportation will be provided. When courses are offered \(1^{\text {st }}\) block, the bus will leave from the high school at 7:30 a.m. therefore, students must be able to commit to arriving early at school in order to board the bus. Personal transportation is allowed pending pre-approval and will be contingent upon obtaining a parking permit from the student's home campus and STC. Course offerings are dependent on the availability of STC staff, and specific courses will only be offered if the minimum enrollment requirements are met. See your counselor for more detailed information regarding this off-campus program.

\section*{STC Dual Enrollment Engineering (DEEA)}

Grade Placement: 11-12
Credit: 1 per course
Prerequisite: 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.

\section*{Transportation, Distribution \& Logistics Courses at a Glance}
\begin{tabular}{|c|l|c|c|c|}
\hline \begin{tabular}{c} 
LOCAL \\
COURSE \#
\end{tabular} & \multicolumn{1}{|c|}{ course name } & CREDIT & \begin{tabular}{c} 
ADVANCED \\
COURSE
\end{tabular} & \begin{tabular}{c} 
MEETS GRAD \\
REQ.
\end{tabular} \\
\hline \(1003 \& 2003\) & STC Automotive Technology Program & 2 & Yes & - \\
\hline \(1005 \& 2005\) & STC Diesel Technology Program & 2 & Yes & - \\
\hline 0176 & Professional Communications & 0.5 & - & - \\
\hline 0532 & Business Information Management I & 1 & - & - \\
\hline \(0531 \& 2531\) & Career Preparation I & \(2-3\) & Yes & - \\
\hline \(3531 \& 5531\) & Career Preparation II & \(2-3\) & Yes & - \\
\hline
\end{tabular}

\section*{Transportation, Distribution \& Logistics Courses \\ Flowchart}

Sample Careers:
- Automotive Techricion
- Truak Driver

\section*{\(9^{\text {th }}\)
\(10^{\text {th }}\)}

Business \& Industry Endorsement
Transportation, Distribution




\title{
Transportation, Distribution, and Logistics Courses
}

\section*{STC Automotive Technology Program}

Course \# 1003 \& 2003

\section*{Grade Placement: 11-12}

Credits: 1 per course
Prerequisite: South Texas College acceptance criteria
The South Texas College (STC) Automotive Technology program is designed to prepare students for employment in the high technology automotive service industry. Students will gain knowledge in automotive air conditioning, electrical systems, fuel injection, transmissions and transaxles, engine performance, brake systems, steering and suspension systems, and computerized automotive control systems. Emphasis will be placed on hands-on learning in the labs to develop diagnostic and troubleshooting skills, as well as repair procedures. After graduating from high school, students are encouraged to continue with STC to finish the coursework for either the certificate of Associate's degree programs. Graduates of the Automotive Technology program are typically placed in dealerships, independent garages and specialty automotive repair facilities. Courses taken for completion of the Certificate Program can be applied toward completion of the Associate of Applied Science Degree in Automotive Technology. Contact your school Counselor for more information on how to enroll into this program.
Since the courses under this program are taught by college instructors at the South Texas College Technology Campus, bus transportation will be provided. When courses are offered \(1^{\text {st }}\) block, the bus will leave from the high school at 7:30 a.m. therefore, students must be able to commit to arriving early at school in order to board the bus. Personal transportation is allowed pending pre-approval and will be contingent upon obtaining a parking permit from the student's home campus and STC. Course offerings are dependent on the availability of STC staff, and specific courses will only be offered if the minimum enrollment requirements are met. See your counselor for more detailed information regarding this off-campus program.

\section*{STC Diesel Technology Program}

Course \# 1005 \& 2005
Grade Placement: 11-12
Credits: 1 per course
Prerequisite: South Texas College acceptance criteria
The Diesel Technology industry is a rapidly growing industry which is requiring a growing number of qualified technicians. In the South Texas College (STC) Diesel Technology program, students will acquire the knowledge and skills necessary for the repair of diesel engines, electrical and electronic control systems, hydraulic systems, air brakes, suspension, steering, and transmissions through a combination of lecture and lab work, to include troubleshooting and diagnostic procedures. After graduating from high school, students are encouraged to continue with STC to finish the coursework for either the certificate of Associate's degree programs. Contact your school Counselor for more information on how to enroll into this program.
Since the courses under this program are taught by college instructors at the South Texas College Technology Campus, bus transportation will be provided. When courses are offered \(1^{\text {st }}\) block, the bus will leave from the high school at 7:30 a.m. therefore, students must be able to commit to arriving early at school in order to board the bus. Personal transportation is allowed pending pre-approval and will be contingent upon obtaining a parking permit from the student's home campus and STC. Course offerings are dependent on the availability of STC staff, and specific courses will only be offered if the minimum enrollment requirements are met. See your counselor for more detailed information regarding this off-campus program.```


[^0]:    Dr. Maria M. Vidaurri
    Superintendent
    Sharyland Independent School district

[^1]:    
    
     contents of this handbook may be amended in the future.

