PINE TREE HIGH SCHOOL

2022-2023

COURSE GUIDE

PINE TREE HIGH SCHOOL MISSION STATEMENT

"A Tradition of Excellence"

The Pine Tree family champions the relentless pursuit of excellence through a compassionate and safe learning environment empowering all students to develop their unique passions and to make a positive impact in a global society.

PTHS SCHOOL SONG

Pirates fight for old Pine Tree High
For you Alma Mater dear
Pirates fight for old Pine Tree High,
For victory is near.
To Pine Tree we'll by loyal
'Til the sun drops from the sky
Remembering until the end,
Pirates fight, never die.

PINE TREE HIGH SCHOOL COLORS

Blue and Gold

PINE TREE HIGH SCHOOL MASCOT

Fightin' Pirate

IMPORTANT PEOPLE ON CAMPUS

Principal	Cleo Wadley
12th Grade Assistant Principal	Caci Brinkley
11th Grade Assistant Principal	Justin Linnstadder
10th Grade Assistant Principal	Melanie Bridges
9th Grade Assistant Principal	Beeper Kraus
12th Grade/PTISD Lead Counselor	Bill Irvine
11th Grade Counselor	Katy Rue
10th Grade Counselor	Hilda Juarez
9th Grade Counselor	Jaclyn Watson
College Specialist	Heather Hernandez
Librarian	Vicky Childers
Librarian Assistant	Frank Jones
Nurse	Whitney Whitaker
Nurse	Courtney Hunter
Registrar	Leidi Gaona
Secretary/Business	Roxanne Allen
Secretary/Counselor	Casie Cowden
Secretary/Discipline/Attendance	Jana Taylor
Secretary/Principal	Karen Wall
Receptionist	Stephanie Graham

HOW TO USE THE COURSE GUIDE

Planning Your Program Of Study

Planning your course of study during junior high and high school is an important step in planning your future. The decisions you make, along with the Program of Study you pursue, will affect your post-secondary plans, including college and career readiness.

College students change their majors an average of three times. This is typical, and you too, will probably reconsider your career goals several times. The decisions you make now, regarding both your Program of Study and the activities in which you engage, will impact your options beyond high school. It is best to pursue a broad, well-rounded Program of Study that will prepare you for a variety of opportunities. Pine Tree ISD offers a wide range of programs designed to give our students a firm foundation for entering college, business or technical school, military services, or the workforce. As a student, you are encouraged to pursue a rigorous, challenging program that is best suited for your needs.

The following pages contain information on graduation programs, graduation requirements, and information on career planning. The guide contains course descriptions, information on prerequisites and grade level placements.

We are confident that you will find the educational opportunities offered in PTISD to be among the best. Please use this book as a guide to planning your coursework and your future. You have very important decisions to make – take them seriously and make them count!

- □ Review the graduation requirements for Pine Tree High School.
- □ Review the 4-year plan that you have completed and/or review records of the high school courses you have taken.
- □ Think about your post-secondary plans and career goals. Decide which college and/or articulated credit opportunities you might want to pursue in high school.
- □ Update your 4-year plan with your counselor in the spring semester of each year.
- □ Plan for your new year of courses.

GRADUATION REQUIREMENTS

GRADE CLASSIFICATION

Students are classified by the number of academic (state) credits they have earned at the beginning of each school year.

GRADE	CLASSIFICATION	CREDITS
9th	Freshman	0.0 – 4.5
10th	Sophomore	5.0 – 9.5
11th	Junior	10.0 – 14.5
12th	Senior	15.0 plus

STAAR / EOC REQUIREMENTS

Students must earn passing scores on 5 End-of-Course (EOC) exams, in addition to earning all required credits for their graduation plan to earn a diploma.

STAAR EOC			
English/Language Arts	**Math**	**Science**	**Social Studies**
English I English II	Algebra I	Biology	U.S. History

FOUNDATION HIGH SCHOOL PROGRAM + ENDORSEMENT

The following plans apply to students who entered high school in the fall of 2014 and thereafter.
All students are required to meet the requirements of the FHSP.

22 Credit Foundation High School Program
Graduation Requirements
(Required for all Endorsements)

ENGLISH 4
Must consist of English I, II, III

MATHEMATICS. 3
Must consists of Algebra I, Geometry and an additional course from approved list

SCIENCE 3
Must include one Biology credit, one credit selected from IPC or Chemistry, or Physics; and one additional/advanced lab-based science

SOCIAL STUDIES. 3
Must include US History, one-half credit Government, one-half credit Economics, and World History or World Geography

OTHER LANGUAGES 2
Must consist of 2 levels of the same language

FINE ARTS 1
Choir, Band, Theater, Art, Dance or Art History

PHYSICAL EDUCATION 1

PROFESSIONAL COMMUNICATIONS 0.5

ELECTIVES 4.5

TOTAL CREDITS 22

Additional Requirements For Endorsements

MATHEMATICS 1

SCIENCE 1

ADDITIONAL ELECTIVES 2
Electives must be chosen from the five endorsement categories of STEM, Business & Industry, Arts & Humanities, Public Services, and/or Multi-Disciplinary Studies

TOTAL CREDITS 26
College Board AP courses and Dual Credit courses can be substituted in appropriate areas for both FHSP and Endorsement credits.

ENDORSEMENTS

All students are required to declare an endorsement in writing. Students will be permitted to change the endorsement with written notification.

There are five endorsement options, which allow students flexibility based on individual interests and career goals. Each endorsement category is designed to prepare students to successfully enter postsecondary education or the workforce upon graduation from high school.

The endorsement and the career areas to which they correspond are as follows:

*** STEM –** Science including computer science, Technology; Engineering & Mathematics (Algebra II, Chemistry and Physics are required for the STEM endorsement).

*** PUBLIC SERVICES –** Education and Training; Government & Public Administration; Health Science; Human Services; and Law, Public Safety, Corrections and Security

*** BUSINESS & INDUSTRY –** Agriculture, Food and Natural Resources; Architecture & Construction; Business Management & Administration; Finance; Hospitality & Tourism; Information Technology; Manufacturing; Marketing; Transportation; and Journalism including broadcast journalism, newspaper and public speaking

*** ARTS & HUMANITIES –** Fine Arts; Economics; English Language Arts; and Other Languages

*** MULTI-DISCIPLINARY STUDIES -** Course sequence to be determined – allows students to pursue courses from more than one Endorsement

RECOGNITIONS

Distinguished Level of Achievement

A student may earn a distinguished level of achievement by completing the requirements of the FSHP, plus the requirements of one endorsement including;

* A fourth credit in mathematics;
* A fourth credit in science;
* The requirements of at least one endorsement.

A student must graduate with a Distinguished Level of Achievement to be considered for the Top 10% and eligible for automatic admission to a Texas public college or university.

Performance Acknowledgements

A student may earn a Performance Acknowledgement in one or more of the following areas:

* AP test score of 3 or above;
* IB test score of 4 or above;
* Outstanding performance on the PSAT, the SAT or the ACT;
* Completion of t least 12 hours of college coursework;
* Bilingualism & literacy;
* Earning a nationally or internationally recognized business or industry certification or license

PINE TREE HIGH SCHOOL ENDORSEMENT OPTIONS

A **MULTIDISCPLINARY STUDIES** endorsement requires completion of the FHSP and at least one of the following:

* four additional/advanced courses, from within one endorsement area or from various endorsement areas, that prepare a student to either successfully enter postsecondary education without the need for remediation or successfully enter the workforce,

OR

*four credits in each of the four foundation areas of English/Language Arts, Mathematics, Science and Social Studies, including a traditional English IV option (academic, Advanced Placement or Dual Credit) and Chemistry and/or Physics,

OR

* four AP or IB (transfer only as PTISD does not offer IB courses) selected from English/Language Arts, Mathematics, Science, Social Studies, and Languages other than English and/or Fine Arts.

A **BUSINESS & INDUSTRY** endorsement requires completion of the FHSP and at least one of the following:

* a coherent sequence of CTE credits, including:
  - at least 2 courses in the same career cluster, and
  - at least 1 advanced CTE course that is the 3rd or higher in a sequence in one of the following career clusters;
    * Agriculture, Food & Natural Resources,
    * Architecture & Construction,
    * Arts, AV Technology & Communications,
    * Business Management & Administration,
    * Finance,
    * Hospitality & Tourism,
    * Information Technology,
    * Manufacturing,
    * Marketing,
    * Transportation, Distribution & Logistics

OR

*Four English/Language Arts electives, including 3 levels in one of the following areas;
- Journalism – Newspaper or Yearbook,
- Speech – Debate or Oral Interpretation

A **PUBLIC SERVICES** endorsement requires completion of the FHSP and at least one of the following:

* a coherent sequence of 4 CTE credits, including:
  - at least 2 courses in the same career cluster, and
  - at least 1 advanced CTE course that is the 3rd course or higher I the a sequence in one of the following career clusters:
    * Health Science,
    * Education & Training,
    * Government & Public Administration,
    * Human Services,
    * Law, Public Safety, Corrections and Security,
    * NJROTC

An **ARTS & HUMANITIES** endorsement requires completion of the FHSP and at least one of the following:

* five Social Studies credits,
OR
* four levels/credits of the same language other than English,
OR
* two levels/credits of one language other than English, and 2 levels/credits of a separate language other than English
OR
* a coherent sequence of four credits in Fine Arts from one or two Fine Arts disciplines of Art, Dance, Music and/or Theatre,

A **STEM** (Science, Technology, Engineering & Mathematics) endorsement requires the completion of the FHSP, plus Algebra II, Chemistry, Physics and at least ONE of the following:

* a coherent sequence of CTE credits, including:
  - at least 2 courses in the same career cluster, and
  - at least 1 advanced CTE course that is the 3rd or higher in a sequence related to STEM;

OR

* a coherent sequence of 4 credits in Computer Science or Computer Programming;

OR

* successful completion of 2 additional science credits beyond Biology, Chemistry and Physics;

OR

* successful completion of 2 additional math credits for which Algebra II is the prerequisite

OR

* a cross-disciplinary study of science and math, including 3 credits from a combination of courses chosen from up to two of the following categories –
  - STEM
  - Computer Science
  - Math courses for which Algebra II is the prerequisite
  - Science courses beyond Biology, Chemistry and Physics

COURSE DESIGNATIONS

Courses are designed in various ways to meet the skills and interests of students. Courses are offered as Regular, Pre-Advanced Placement, Advanced Placement or Dual Credit. A student's Program of Study may be a combination of courses with different designations. The student, school, and parent work together to determine the best combination for each learner.

Regular Courses

The PTHS on-level academic curriculum is a college bound curriculum. These core and elective courses use a variety of teaching strategies, student activities, and assessments. The curriculum requires students to develop critical thinking and problem-solving skills as well as master core content. Courses are taught on grade-level.

Pre-AP (English)/ Honors (Other Subjects)/ AP Courses

*****NOTE**** **DUE TO THE DEVELOPMENT OF COLLEGE BOARD'S PRE-AP CURRICULUM, THEY NOW REQUIRE DISTRICTS TO PURCHASE THE CURRICULUM FOR COURSES TO RETAIN THE PRE-AP LABEL. PTHS WILL CONTINUE TO USE A RIGOROUS DISTRICT DEVELOPED CURRICULUM ALIGNED TO PRE-AP STANDARDS AND STATE TEKS. STUDENTS WILL RECEIVE THE SAME LEVEL OF GPA POINTS AS BEFORE. ENGLISH I AND ENGLISH II WILL REMAIN LABELED AS PRE-AP COURSES DUE TO THE COLLEGE BOARD CURRICULUM BEING A PART OF THEIR MOST RECENT CURRICULUM ADOPTION.**

PreAP English/Honors/ AP core and elective courses are designed to challenge motivated students and prepare them for success in college level coursework in high school and beyond. These advanced courses move at a faster pace, are more academically challenging and require more independent learning than regular academic courses.

PTHS offers AP courses to students who are ready to engage in college level course content and rigor. Courses are available in English, Mathematics, Science, Social Studies Humanities, Spanish, and Art. Students enrolled in AP courses are expected to take the AP examination for their course. This testing is offered free of charge and affords students the opportunity to take this credit to their postsecondary institution. Students are responsible for assuring that their college/university will accept AP credit and what score they must achieve for the credit to transfer.

Note: ***Students wishing to DROP a Pre-AP/Honors/ AP course must turn in their DROP request form prior to the end of the fourth week of each semester.***

Dual Credit Courses

PTHS offers students the opportunity to enroll in a variety of courses through several area colleges/universities. Students and counselors are responsible for assuring that students meet all qualifications for the dual credit program.

Note: ***Please refer to the DUAL CREDIT section of this guide for information on all dual credit courses offered and admission requirements.***

Advanced Technical Credit Courses

Advanced Technical Credit (ATC) is another way to earn college credits. Students can begin ATC courses in high school and continue in a community college or technical school. The result is a certificate or an associate of applied science degree.

Gifted & Talented Services

Pine Tree ISD recognizes the gifted and talented as those whose abilities, talents, and potential for accomplishment are so outstanding that they require a variety of special provisions to meet their educational needs. Accordingly, students are offered Pre-Advanced Placement classes, Advanced Placement (AP) classes, Dual-Credit classes and differentiated instruction to meet the unique needs of gifted and talented students.

The goals of the Pine Tree ISD Gifted and Talented Program are to provide opportunities to:

- Enhance student understanding of self and others
- Develop student skills in creative thinking, critical thinking, and logical reasoning
- Strengthen student ability to apply depth and complexity to core subject areas of study
- Develop life-long learning skills
- Extend student skills in research and independent study
- Broaden student skills in written, visual, and oral communication
- Experience in-depth knowledge and understanding of curriculum content

Special Education Services

PTHS seeks to provide students with disabilities valuable educational experiences that prepare them for the future. Each student has the opportunity to participate in an appropriate educational program designed to meet his/her individual needs.

Services are provided in the least restrictive environment that allows access to the general education curriculum and instruction with non-disabled peers to the extent that is appropriate for that student. At the secondary level, the Special Education department provides a full continuum of services to meet student needs. These services include general education, resource, self-contained, itinerant services and vocational education. The educational setting and services for secondary students with disabilities are provided upon recommendation of the Admission Review Dismissal (ARD) Committee.

AP CAPSTONE DIPLOMA PROGRAM

The College Board's AP Capstone is an innovative and engaging college-level program for high school students that complements and enhances discipline-specific AP courses. It's built on two new courses—AP® Seminar and AP Research—that immerse students in the practice of critical skills needed to distinguish themselves in college and life. AP Capstone is the pinnacle of the high school experience, encouraging a passion for learning and transforming students into curious, collaborative, and independent thinkers with skills that are valued and sought after by colleges and universities.

AP Capstone Diploma

The AP Capstone Diploma is awarded to students who score a 3 or higher on both AP Capstone courses (AP Seminar & AP Research) in addition to scoring a 3 or higher on 4 additional AP tests.

AP Capstone Certificate

The AP Captsone Certificate is awarded to those students who score a 3 or higher on both AP Capstone courses (AP Seminar & AP Research) but not the 4 additional AP tests, will be awarded the AP Capstone Certificate.

AP Capstone Courses

AP Seminar

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level III

This foundational course, typically taken in grade 10 or 11, provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a variety of lenses and consider multiple points of view to develop deep understanding of complex issues as they make connections between these issues and their own lives. Students read articles, research studies, and foundational and philosophical texts; listen to and view speeches, broadcasts, and personal accounts; and experience artistic and literary works to gain a rich appreciation and understanding of issues. Teachers have the flexibility to choose appropriate themes that allow for deep exploration based on student interests, local and civic issues, global or international topics, and concepts from other AP courses.

AP Research

Prerequisite(s): AP Seminar
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

The second course in the AP Capstone experience allows students to design, plan, and conduct a yearlong research-based investigation on a topic of individual interest. Through this inquiry and investigation, students demonstrate the ability to apply scholarly understanding to real-world problems and issues. Students further the skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information to build, present, and defend an argument

AWARDING OF COURSE CREDIT

Awarding of Credit

Students will receive credit at the end of each semester for each course regardless if the course is a semester or full year course (comprised of two semesters). For full year courses the two semester courses averages can be averaged together to earn the full credit (1.0) in the following situations:

- The two semesters are averaged together if the course is taken in sequence within one academic year;

  AND

- The average of the two semester course is 70% or greater.

Sample One:

Fall Semester – Algebra I grade earned – 65%
Spring Semester – Algebra I grade earned – 75%
Student will receive 1.0 credit for Algebra I with an average of 70%

Sample Two:

Students who take one semester in a Pre-Advanced Placement or Advanced Placement course and the second semester of the same courses in the regular setting will earn the full credit and the appropriate GPA ranking points per each semester.

Fall Semester – Pre-AP Biology – Advanced grade points
Spring Semester – Biology – regular grade points earned

Denial of Credit

Students must be in attendance 90% of the time a class is in session to receive credit. When attendance falls below 90% of the days the class is offered, after consideration of absences labeled as due to extraordinary circumstances, the student and parent(s) will be notified. The Attendance Review Committee shall hear all cases where a student's attendance has fallen below 90%. Credit for courses with attendance below 90% may be denied.

CORRESPONDENCE COURSEWORK

High school students may earn up to two total credits toward graduation through correspondence courses. Prior approval from the grade level counselor is required, and a PTHS counselor shall monitor the correspondence course examination. These courses must be taken from and approved institution, and the costs for tuition, fees, and books are the responsibility of the student or parent. A passing score is required on the final exam of the course, and a score of 70 or above is required as the final grade for credit to be granted.

Graduating seniors must complete all correspondence courses and have grades submitted to the PTHS registrar at least thirty days prior to graduation in order for the course to count toward graduation requirements.
[For further information, see policies at EEJC.]

CREDIT BY EXAMINATION

If a Student Has Taken the Course

A student who has previously taken a course or subject—but did not receive credit for it—may, in circumstances determined by the teacher, counselor, principal, or attendance committee, be permitted to earn credit by passing an exam on the essential knowledge and skills defined for that course or subject. Prior instruction may include, for example, incomplete coursework due to a failed course or excessive absences, home schooling, correspondence courses, or independent study supervised by a teacher. The student or parent is responsible for the cost of the exam as set by the approved provider.
The counselor or principal would determine if the student could take an exam for this purpose. If approval is granted, the student must score at least 70 on the exam to receive credit for the course or subject. If credit is awarded, the score earned and credit is placed on the student's transcript and is used to calculate GPA.
The attendance review committee may also offer a student with excessive absences an opportunity to earn credit for a course by passing an exam.
A student may not use this exam, however, to regain eligibility to participate in extracurricular activities.
[For further information, see the counselor and policies EEJA (LOCAL).]

If a Student Has Not Taken the Course

A student will be permitted to take an exam to earn credit for an academic course or subject area for which the student has had no prior instruction or to accelerate to the next grade level. A student will earn credit with a passing score of at least 90 on the exam. Depending on the student's grade level and course for which the student seeks to earn credit by exam, an end-of-course assessment (EOC) may be required for graduation. Grades earned through CBE with no prior instruction are not included in class rank or GPA.
If a student plans to take an exam, the student (or parent) must register with the principal no later than 30 days prior to the scheduled testing date (see counselor for dates). The district will attempt to honor a request by a parent to administer a test on a date other than the published dates. The district does not charge for CBE with any prior instruction; however a $30 deposit is required and must accompany each application. The deposit is returned upon completion and scoring of the exam. If the district agrees to administer a test other than the one chosen by the district, the parent must purchase a test from a university approved by the State Board of Education. [For further information, see EEJB (LOCAL).]
If a student plans to take an exam, the student (or parent) must register with the principal no later than 30 days prior to the scheduled testing date (see counselor for dates). The district will attempt to honor a request by a parent to administer a test on a date other than the published dates. The district does not charge for CBE with any prior instruction; however a $30 deposit is required and must

accompany each application. The deposit is returned upon completion and scoring of the exam. If the district agrees to administer a test other than the one chosen by the district, the parent must purchase a test from a university approved by the State Board of Education. [For further information, see EEJB (LOCAL).]

DISTANCE LEARNING

Distance learning includes courses that encompass the state-required essential knowledge and skills but are taught through multiple technologies and alternative methodologies such as satellite, Internet, video-conferencing, and instructional television. Depending on the course in which a student enrolls, the course may be subject to the "no pass, no play" rules. In addition for a student who enrolls in a course for which an end-of-course (EOC) is required, the student must still take the corresponding EOC assessment and the requirements related to the incorporation of the EOC score into the student's final course grade and the implications of these assessments on graduation apply to the same extent as they apply to traditional classroom instruction. Please contact the school counselor with any questions regarding this information.

If a student wishes to enroll in a correspondence course or a distance-learning course that is not provided through an approved institution in order to earn credit in a course or subject, the student must receive permission from the principal prior to enrolling in the course or subject. If the student does not receive prior approval, the district will not recognize and apply the course or subject toward graduation requirements or subject mastery.

EXTRA-CURRICULAR ACTIVITIES

EXTRA-CURRICULAR ELIGIBILITY

A student may not be absent for extra-curricular participation from class in any course more than 10 times during the school year and seven times in a semester.

A student may participate in extra-curricular activities on or off campus at the beginning of the school year only if the student has earned the cumulative number of credits in state approved courses.

Grade 9	Promoted from 8th grade
Grade 10	5 credits
Grade 11	10 credits or 5 credits during the previous twelve months
Grade 12	15 credits or 5 credits during the previous twelve months

All credits must count toward state graduation requirements. At the conclusion of any six weeks grading period, a student must not have recorded a six weeks grade lower than 70 in any course for that six- week period. A student with a failing grade is suspended from participation in any extra-curricular activity, starting seven (7) calendar days after the end of the six weeks. During that

suspension period, a student may practice or rehearse with other students for an extra-curricular activity but may not participate in a competition or a performance.
Three weeks following each six- week grading period, grades are checked for all students who failed one or more courses during the preceding six weeks. If a student is passing all courses at the end of the three- week period, he/she may regain eligibility seven calendar days after the end of the three-week evaluation period. If the student is still failing one or more courses at the three-week period, he/she remains ineligible until the end of the six- week grading period.
Students receiving an Incomplete in any course at the end of the six weeks period will become/remain ineligible seven calendar days after the end of the grading period. Once the Incomplete has been officially updated and if the grade is passing, the student will regain immediate eligibility.
Students are limited to eight (8) hours per week of practice per activity outside the school day.
Students may participate in no more than one contest or performance per week for each activity.

EXTRA-CURRICULAR ELIGIBILITY COURSE WAIVER

All Pre-Advanced Placement, Advanced Placement, Dual Credit courses, and Precalculus will be considered an honors course for the purpose of eligibility. This list of courses is updated annually.

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

CORE COURSES

NCAA Division I and II require 16 core courses

NCAA Division I will require 10 courses to be completed prior to the seventh semester (seven of the ten courses must be from a combination of English, math, or natural or physical science that meet the distribution requirements below.) These 10 courses are "locked" in at the seventh semester and cannot be retaken for grade improvement to meet initial eligibility requirements for competition.

* Beginning August 1, 2016: it will be possible for Division I college-bound student-athletes to still receive athletics aid and the ability to practice with the team if he or she fails to meet core-progression course requirements, by meeting academic redshirt status (see NCAA website for details).

TEST SCORES

- **DIVISION I** has a sliding scale for test score and core grade-point average.
- **DIVISION II** has a minimum SAT score requirement of 820 or an ACT sum score of 68 (sliding scale begins August 2018). The SAT score used for NCAA purposes includes **only** the critical reading and math sections. **The writing section of the SAT is not used.**
- The ACT score used NCAA purposes is a sum of the four sections on the ACT: English, math, reading and science.
- **All SAT and ACT scores must be reported directly to the NCAA Initial-Eligibility Clearinghouse by the testing agency. Test scores that appear on transcripts will no longer be used. When registering for the SAT or ACT, use the clearinghouse code of 9999 to make sure the score is reported to the clearinghouse.**

GRADE-POINT AVERAGE

- Be sure to look at your high school's list of NCAA Courses on the NCAA Eligibility Center's website (www.eligibilitycenter.org). Only courses that appear on your school's list of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- ***Division I** students enrolling full time before August 1, 2016, should use Sliding Scale A to determine eligibility to receive athletics aid, practice and competition during the first year.
- **Division I** GPA required to receive athletics aid and practice on or before August 1, 2016 is 2.000.
- **Division I** GPA required to eligible for competition on or after August 1, 2016, is 2.300.
- **Division II** core GPA requirement is a minimum of 2.000.
- **Remember, the NCAA GPA is calculated using NCAA core courses only.**

DIVISION I CORE-COURSE RULE

16 Core Courses:

- 4 years of English
- 3 years of mathematics (Algebra I or higher)
- 2 years of natural/physical science (one year of lab if offered)
- 1 year of additional English, mathematics or natural science
- 2 years of social science
- 4 years of additional courses (from any area above, world language or comparative religion/philosophy)

DIVISION II CORE-COURSE RULE

16 CORE COURSES

- 3 years of English
- 2 years of mathematics (Algebra I or higher)
- 2 years of natural/physical science (one year of lab if offered)
- 3 years of additional English, mathematics or natural/physical science
- 2 years of social science
- 4 years of additional courses (from any area above, world language or comparative religion/philosophy)

GRADE POINTS & CLASS RANK

Class rank shall be based on weighted grade point averages of courses completed in grades 9–12 and in high school courses taken in grades 7 and 8 for state graduation credit. Final class rank will be established after the fifth six-weeks grading period of the senior year.

Pine Tree ISD Board Policy regarding GPA can be found at
http://pol.tasb.org/Policy/Download/541?filename=EIC(LOCAL).pdf

In calculating a student's grade point average (GPA) for the purpose of determining class rank, valedictorian, salutatorian, honor graduates, and top ten percent, classes will receive weighted grade points according to the attached grade point scale.

GRADE POINT CHART

Grade	GPA Level I	GPA Level II	GPA Level III
100	4.0	5.0	5.5
95	3.5	4.5	5.0
90	3.0	4.0	4.5
85	2.5	3.5	4.0
80	2.0	3.0	3.5
75	1.5	2.5	3.0
70	1.0	2.0	2.5

REGULAR COURSES - LEVEL I PRE-AP/HONORS/DUAL CREDIT - LEVEL II AP COURSES - LEVEL III

Once a student's GPA has been determined by the above method, the students will be ranked with the student with the highest grade-point average being ranked number 1, the student with the second highest grade-point average ranked number 2, and so forth.

GRADUATION ACTIVITIES

GRADUATION EXPENSES/ACTIVITIES

Because students and parents will incur expenses in order to participate in the traditions of graduation—such as the purchase of invitations, senior ring, cap and gown, and senior pictures—both student and parent should monitor progress toward completion of all requirements for graduation. The expenses often are incurred in the junior year or first semester of the senior year. **Please note:** Graduation ceremonies are a privilege not a right. Negative disciplinary actions may result in a student not being allowed to participate in graduation activities/ceremonies. See the Student Handbook for more information.

GRADUATION SPEAKERS

Certain graduating students will be given an opportunity to have speaking roles at graduation ceremonies.
A student must meet local eligibility criteria, which may include requirements related to student conduct, to have a speaking role. Students eligible for speaking roles will be notified by the principal and given an opportunity to volunteer.
Please reference Student Rights and Responsibilities Student Expression FNA (LOCAL).

TEXAS GLOBE SCHOLARS

The Texas Scholars Award is presented annually to high school students upon successful completion of either the Recommended Program or Distinguished Achievement Program. Texas Scholars are high school students who have completed specific courses that prepare them for a university, college, or trade school, as well as the skilled workforce.

Emphasis is placed in the areas of mathematics, science, social studies, and English Language Arts. The Texas Scholars' philosophy is based on the belief that it is better to successfully complete the academically challenging courses than to take only the minimum required courses.
For more information about The Texas Scholars Program go to www.texasscholars.org.
Students can be designated as either a Texas Scholar or as a Texas Scholar with Merit.

Qualifications for each are as follows:

Texas Scholar

- Graduate from high school having completed the Foundation High School Program with an Endorsement

Texas Scholar w/Merit

- Graduate from high school having completed the Foundation High School Program Distinguished Achievement Program
- Complete a math course beyond Algebra II

COURSE

DESCRIPTIONS

ENGLISH/LANGUAGE ARTS COURSE DESCRIPTIONS

English I Pre-AP

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th
GPA Level: Level II

English I Pre-AP is a course for students of above-average ability who want the challenges of advanced studies in vocabulary, grammar, literature, and composition and is willing to accept the additional responsibilities of the course work. In composition, emphasis is placed on paragraph structure, development, organization, and grammar control, culminating into well-developed (four paragraphs or more) themes. In literature, emphasis is on genres (short story, epic, poetry, drama, novel, and mythology) with a focus on literary terms and literary analysis. Students work through the research process and learn to use various research sources in the library.

English I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th
GPA Level: Level I

Students enrolled in English I continue to increase and refine their communication skills. High school students are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English and produce final, error free drafts. In English I, students practice all forms of writing. An emphasis is placed on organizing logical arguments with clearly expressed related definitions, theses, and evidence. Students write to persuade and to report and describe. English I students read extensively in multiple genres from world literature such as reading selected stories, dramas, novels, and poetry originally written in English or translated to English from Asian, classical Greek, European, African, South American, and North American cultures. Students learn literary forms and terms associated with selections being read. Students interpret the possible influences of the historical context on a literary work. English I integrates grammar, composition, and literature. The student works on grammar skills and sentence structure in order to improve the student's speaking and writing.

English II Pre-AP

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th
GPA Level: Level II

English II Pre-AP is a course for students of above-average ability who want the challenges of advanced studies in vocabulary, grammar, literature, and composition and are willing to accept the additional responsibilities of the course work. In composition, emphasis is placed on paragraph structure, development, organization, and grammar control, culminating into well-developed (four paragraphs or more) themes. In literature, emphasis is on genres (short story, epic, poetry, drama, novel, and mythology) with a focus on literary terms. Students work through the research process and learn to use various research sources in the library.

English II

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th
GPA Level: Level II

Students enrolled in English II continue to increase and refine their communication skill. These high school students are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English and produce final, error-free drafts. In English II, students practice all forms of writing. An emphasis is placed on persuasive forms of writing such as logical arguments, expressions of opinion, and personal forms of writing. English II students read extensively in multiple genres from world literature such as reading selected stories, dramas, novels, and poetry originally written in English or translated to English from Asian, classical Greek, European, African, South American, and North American cultures. Students learn literary forms and terms associated with selections being read. Students work through the research process and learn to use various research sources in the library. Grammar skills are reinforced.

English III AP

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 11th
GPA Level: Level III

English III AP is designed to help students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. Students will become skilled writers with the ability to compose in a variety of forms, including persuasive essays on nonliterary topics and various kinds of analytical compositions. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way common usage and the resources of the language contribute to effectiveness in writing. The intense concentration on language in this course should enable students to apply grammatical conventions both appropriately and with sophistication; additionally, students will develop stylistic maturity in their prose.

English III

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 11th
GPA Level: Level I

Students enrolled in English III continue to increase and refine their communication skills. High school students are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English and produce final, error-free drafts. In English III, students practice all forms of writing. English III students read extensively in multiple genres from American literature and other world literature. Periods from American literature may include but not be limited to the pre-colonial period; colonial and revolutionary periods; romanticism and idealism; realism and naturalism; early 20th century; and late 20th century. Students learn literary forms and terms associated with selections being read. Students interpret the possible influences of the historical context on a literary work. Students work through the research process and learn to use various research sources in the library. Grammar skills are reinforced.

English IV AP

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 12th
GPA Level: Level III

English IV AP focuses on British literature and composition. Through careful reading and critical analysis of selected texts, students will increase their understanding of the ways writers use language to convey meaning and provide pleasure for their readers. The goal of writing assignments will be to increase students' ability to express their ideas clearly, cogently, and even elegantly.

English IV

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 12th
GPA Level: Level I

Students enrolled in English IV continue to increase and refine their communications skills. High school students are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English and produce final, error-free drafts. In English IV, students are expected to write
in a variety of forms, including business, personal, literary, and persuasive texts. English IV students read extensively in multiple genres from British literature and other world literature. Periods from British literature may include but not be limited to the old English period, medieval period, English renaissance, 17th century, 18th century, romantic period, Victorian period, and modern and post-modern period. Students learn literary forms and terms associated with selections being read. Students interpret the possible influences of the historical context on a literary work. English IV combines the study of grammar, vocabulary, composition, and British literature. Students will write a number of five paragraph theses and a research paper at least 500 words long. The study of literature will include both classical and contemporary works of British literature.

Literary Genres

Prerequisite(s): Placement Into Course
Credit: 1.0 All Year
Grade Level: 12th
GPA Level: Level I

Students will spend time analyzing the fictional and poetic elements of literary texts and read to appreciate the writer's craft. They will discover how well written text can serve as models for their own writing. Students will also respond to oral, written and electronic text to connect their knowledge of the world.

MATHEMATICS COURSE DESCRIPTIONS

Algebra I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th
GPA Level: Level I

Algebra I provides the basis for all higher-level mathematics and science courses. The content includes a review of arithmetic operations (addition, subtraction, multiplication, and division) of positive and negative numbers. The course covers the study of equations in one and two variables (unknowns represented by letters), polynomials, algebraic fractions, roots and powers, and second-degree equations. Students learn to apply the material to real-life situations by solving word problems. Students learn how to apply the use of a TI83+/84+ graphing calculator in working mathematical concepts. It is truly the foundation course for all other math courses.

Geometry Honors (Formerly known as PRE-AP)

Prerequisite(s): Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level II

Geometry Honors covers the same course content as the regular section, plus extensive application of learned skills in new settings-word (application) problems. Enrichment activities are utilized within each topic to encourage students to use higher level thinking skills in their study of geometric concepts. Students will be incorporating the TI 84+ and TI 92 technology in various class activities.
Geometry Honors is recommended for students with A's and high B's in Algebra I Honors or took Algebra I as an 8th grader.

Geometry

Prerequisite(s): Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Geometry is the study of points, lines, planes, and the relationship of figures. Students investigate properties in synthetic, coordinate, and transformational approaches. Properties of angles and triangles are examined and used extensively. Also, studies of polygons, circles, coordinate graphing of points, linear equations, volume, and surface area of figures are investigated.

Algebra II Honors (Formerly known as PRE-AP)

Prerequisite(s): Algebra I
Credit: 1.0 All Year
Grade Level: 10th -12th
GPA Level: Level II

Algebra II Honors covers the same course content as the regular section, plus extensive application of learned skills in new settings (word problems). Enrichment activities are utilized within each topic to encourage students to use higher level thinking skills in their study of algebraic concepts. Transformations of parent functions are analyzed. An understanding of the graphing calculator (TI83+/84+) is required for this course.

Algebra II Honors is recommended for students with A's and high B's in Geometry and Algebra I Honors. This course is designed for students who begin the math program with eighth grade Algebra I.

Algebra II

Prerequisite(s): Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Algebra II continues the study of Algebra I of linear equations, linear inequalities, and their graphs. Related topics include systems of equations, matrices, and factoring polynomials. Solutions to quadratic equations, polynomial, radical equations, and rational equations are examined. Complex numbers, conic sections, roots and powers, and logarithms are other areas of intensive study. Word problems are a vital part of the requirements of this course.

Math Models With Applications

Prerequisite(s): Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Mathematical Models with Applications is a practical course designed to teach students how to apply mathematics in business and consumer-related situations. A review of algebra I and geometry concepts will be the main focus in preparation for state assessment. Those students who have difficulty with algebra and geometry are highly recommended to take Math Models. Most topics of study involve the earning and spending of money in an economic society. Students will use programmable calculations and computers to investigate the relationship of graphs and the data they represent to interpret information. Students will be required to investigate, compare, and evaluate information to make and justify consumer decisions. This is not considered college-prep and is not one of the three math courses most colleges require for admission.

Advanced Quantitative Reasoning

Prerequisite(s): Geometry & Algebra II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

Advanced Quantitative Reasoning is not a college preparatory course. It is for the student needing a 4th math credit to graduate on the recommended plan. AQR includes the analysis of information using statistical methods and probability, modeling change and mathematical relationships and spatial and geometric modeling for mathematical reasoning. Students learn to become critical consumers of real-world quantitative data, knowledgeable problem solvers who use logical reasoning, and mathematical thinkers who can use their quantitative skills to solve authentic problems. Students develop critical skills including investigation, research, collaboration, and both written and oral communication of their work, as they solve problems in many types of applied situations. Daily assignments, along with projects and presentations that will require research outside the class, will be assigned on a regular basis.

Pre-Calculus Honors (Formerly known as PRE-AP)

Prerequisite(s): Algebra I, Geometry & Algebra II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level II

Pre-Calculus Honors is a one-year study of various types of functions that follow those studied in Algebra II. Graphing calculator-based technology is used throughout the course to enhance student understanding of various mathematical concepts. Students are required to know how to use the TI 83+/84+ graphing calculator prior to pre-calculus. The study of polynomial functions, rational functions, exponential functions, logarithmic functions, radical functions, trigonometric functions, sequences and series, parametric functions, vectors, and limits are the major topics of this course. During this study emphasis will be on equations, inequalities, domain, rage, x and y-intercepts, symmetry, odd/even, continuity, one-to-one, asymptotes, and behavior, theory of equations, transformations, applications, and graphical representations of various functions and non-functions. This content features realistic applications, mathematical modeling (algebraic and geometric), geometric transformations, and algebraic manipulations. Pre-Calculus Honors is designed for the student who plans to take Calculus AP and/or Calculus related courses in college. Pre-Calculus Honors is recommended for those students with A's and B's in Algebra II Pre-AP. A background in Algebra II Honors is strongly recommended. In this course, students will be encouraged to use higher level thinking skills to examine possible results to various mathematical situations.

Pre-Calculus

Prerequisite(s): Algebra I, Geometry & Algebra II
Credit: 1.0 All Year
Grade Level:11th – 12th
GPA Level: Level I

Pre-Calculus is a one-year study of numerous types of functions that follow those studied in Algebra II. A graphing calculator is used throughout the course to enhance student understanding of various mathematical concepts. Equations, inequalities, polynomial functions, continuity, theory of equations, sequences and series, complex numbers, rational functions, radical functions, logarithmic and exponential functions, trigonometric functions and various applications of trigonometry are the major topics of this course. This content features realistic applications, mathematical modeling (algebraic and geometric), geometric transformations, and algebraic manipulations. Pre-Calculus is designed for the college-bound student who does not plan to take Calculus Pre-AP in high school. A strong Algebra II background is highly recommended.

Calculus AP

Prerequisite(s): Pre-Calculus
Credit: 1.0 All Year
Grade Level: 12th
GPA Level: Level III

Calculus AP consists of the definition, proof, and evaluation of limits. Derivatives of algebraic functions and the use of derivatives to analyze graphs are heavily stressed. Application problems emphasizing minimum-maximum, rate of change, and related rates are covered. Techniques of integration are emphasized with applications related to the determination of area, volume, and work. The differentiation and integration of exponential, logarithmic, and trigonometric functions are discussed. The analysis of slope fields and their connection to differential equations is also utilized. Solutions to differential equations are generated. Advanced techniques of integration such as integration by parts and partial fractions are also included as topics of the course. This course is designed for, although not limited to students who began the AP math program in eighth

grade with Algebra I. Students taking Calculus AP are encouraged to take advancement placement exams to earn college credit in various math courses.

Financial Math

Prerequisite(s): ***Algebra I***
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I
Students will build upon the knowledge and skills for mathematics in Algebra I and continue to with the development of mathematical reasoning related to Algebraic relationships including linear, quadratic, square root, rational, cubic, cube root and logarithmic functions.

Independent Study In Math

Prerequisite(s): ***Placement Into Course***
Credit: 1.0 All Year – NOT CONSIDERED A MATH CREDIT TOWARDS GRADUATION
Grade Level: 9
GPA Level: Level I
This course is intended to create strategic mathematical learners from underprepared mathematics students. The basic understandings will stimulate students to think about their approach to mathematical learning.

SCIENCE COURSE DESCRIPTIONS

Biology AP

Prerequisite(s): Biology Honors – Recommended: Chemistry – Co-requisite: Algebra II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

Advanced Placement Biology allows students to gain concurrent high school and college credit by preparing for and passing a college placement test in May. College Board prepares the objectives for the class and the exam in May. The curriculum includes one semester of Cell Biology and one semester of Organismic Biology, which includes the study of plants, animals and human body systems. Students will perform twelve laboratory activities required by the College Board and write formal lab reports for these. Some of these labs include cutting bacterial DNA and performing gel electrophoresis; inserting viral DNA in bacterial DNA; determining the rate of water loss by plants; and the light absorbance by chloroplasts of spinach leaves. The curriculum as set by the College Board is demanding in the level of understanding necessary and requires a high level of personal commitment. Students must be self-disciplined and self-motivated. This course is a must for any student interested in medical school, dental school or veterinary school.

Biology Honors (Formerly known as PRE-AP)

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th
GPA Level: Level II

Biology Honors is a rigorous college preparatory course that develops critical thinking skills necessary for moving into the AP curriculum. An emphasis is placed on laboratory investigations, including independent background research and data analysis. Cell biology topics include structure, function, and reproduction of cells. Biomolecules are prominent during the study of photosynthesis, cellular respiration, protein synthesis, and genetics. The topics of classification and evolution are also analyzed. After a survey of ecology, students will study the six kingdoms of life. Organismal biology will include investigations using live specimens, preserved specimens, and computer models to study bacteria, viruses, protists, fungi, plants, and animals. Emphasis is placed on classification, cell specialization, tissues, organs, and systems.

Biology

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th
GPA Level: Level I

Biology is a course designed for the majority of the high school students. A basic understanding of the nature of life is developed through classroom and laboratory study. The first semester covers the topics of biomolecules, cell structure and function, photosynthesis and respiration, mitosis and meiosis, and genetics. Second semester topics consist of evolution, ecology and a study of the six kingdoms of life. Classification, structure, function, and reproduction are analyzed during the study of bacteria, viruses, and protists. The study of fungi, plants, and animals also includes cell specialization, tissues, organs, and systems.

Integrated Physics & Chemistry

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 10th
GPA Level: Level I

Integrated Physics and Chemistry is a general course, which includes both chemistry and physics topics. In this course students will be able to examine the importance of chemistry and physics in their daily lives. A general knowledge of mathematics and the ability to follow instructions will provide the necessary background for entry into this lab-based course.

Chemistry AP

Prerequisite(s): Chemistry Honors
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

Advanced Placement Chemistry allows students to gain concurrent high school and college credit in the high school year. College credit is given based upon performance on a College Board developed test, which is administered in May. The College Board requires objectives for the course and a rigid curriculum in chemistry. The laboratory requirements are demanding and equipment used is highly technical. A computer software program loaded onto the school mainframe provides college level problems to assure a higher level of understanding and provides extra tutorial opportunities. Research requirements from the internet are a regular part of the curriculum. The levels of the concepts examined in this course are challenging and personal study requirements are rigorous. Students must be both self-disciplined and self-motivated. By the end of the course, students have a full understanding of chemical reactions and interactions. At the end of the year, AP students give back to the school as they provide a series of demonstrations to the 6th grade students. They research these demonstrations throughout the year and then become role models to the younger students through their demonstrations.

Chemistry Honors (Formerly known as PRE-AP)

Prerequisite(s): One science credit & Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level II

Chemistry Honors is a college-preparatory class, which provides a solid foundation in the concepts of chemistry. Students must be self-disciplined and self-motivated. Students learn chemical principles through extensive problem solving, computer applications, and laboratory experimentation. A computer software program loaded onto the school mainframe provides college level problems to assure a higher level of understanding. These tutorial programs are incorporated into the curriculum and allow students extra tutorial help outside of class. Laboratory experiences are a regular part of the program and tie the instruction into real world applications. Safe laboratory practices, understanding of safe storage, and proper use of chemicals makes the course both challenging and practical. A strong math background and high level of reasoning skills are necessary for successful completion of this course. Mathematics is used throughout the course as the students balance equations, convert units, and solve problems. Students completing Chemistry Honors are ready for Chemistry AP as a junior or senior. If their schedule does not permit, they are more than ready for college level Chemistry at a four-year university.

Chemistry

Prerequisite(s): One science credit & Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Chemistry is a required class for the recommended and distinguished graduation plans which correlate the state TEKS with the study of the concepts of Chemistry. Students learn chemical principles through problem solving, computer applications, and laboratory experimentation. Laboratory experiences are a regular part of the program and tie the instruction into real world applications. Safe laboratory practices, understanding of safe storage, and proper use of chemicals makes the course both challenging and practical. A strong math background and high level of reasoning skills are necessary for successful completion of this course. Mathematics is used throughout the course as the students balance equations, convert units, and solve problems. Successful completion of this course provides a solid foundation in chemistry.

Physics AP

Prerequisite(s): Physics Pre-AP
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

Physics AP C-Mechanics is a calculus-based course in physics, designed for students taking their second year of high school physics. This course is equivalent to the first semester of college physics, taken by most engineering students. Frequent lab activities and design projects are combined with daily problems-solving exercise to prepare students for the AP exam. Students scoring a 3 or higher on the AP exam at the end of the year qualify for up to 4 hours of college credit (depending on the college/university). A strong math background and a high level or reasoning ability is required for success.

Physics Honors (Formerly known as PRE-AP)

Prerequisite(s): N/A
Credit: 1.0 Credit
Grade Level: 11th – 12th
GPA Level: Level II

Physics Honors is a college-preparatory class for science and engineering majors in college. Physics Honors will emphasize everyday applications of physics. The applications will be studied through the use of experiments, design projects, and computer-assisted instructions. When students complete this course, they are ready for Physics AP or college physics. A strong math background and high level of reasoning skills are requirements for this course.

Physics

Prerequisite(s): Algebra I or concurrently with Algebra I
Credit: 1.0 Credit
Grade Level: 9th – 12th
GPA Level: Level I

Physics emphasizes everyday applications of physics. The applications will be studied through the use of experiments, design projects, and computer-assisted instruction. This course will provide non-science majors with an introduction to how the “world works” and future Physics AP students with a firm foundation in the concepts of mechanics, heat, waves and optics.

Environmental Science AP

Prerequisite(s): N/A
Enrollment in Algebra II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

Environmental Science AP allows students to gain both college credit and high school credit. College credit is given based upon performance on the College Board developed test administered in May. Environmental Science AP is designed 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 and/or preventing them. Environmental Science AP is a science course with strong laboratory and field investigation components, which include analytical thinking and problem solving skills. Some of the activities will include collection and analysis of samples from the environment, development of experiments, and presentation of analysis of data in statistical and graphical form. Field trips are required by the College Board curriculum for each topic and a project is required each six weeks.

Environmental Systems

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Environmental Systems is a laboratory-based course designed to guide students to use critical thinking and problem solving skills. Students will explore the relationships of ecosystems, natural resources, energy flow, and the effects of man in the environment. Lab activities such as population studies, water and land pollution, and identification of indigenous plants and animals will be performed both in the classroom and in the field.

Forensic Science

Prerequisite(s): Biology & Chemistry
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

Forensic science is an interdisciplinary science course that uses the principles of biology, anatomy, chemistry, physics, earth science, and the arts to solve crimes using scientific knowledge and reasoning. Students will incorporate the use to technology, communication skills, language arts, art, and mathematics to interpret crime scenes and solve crimes. Students will be asked to read, research, hypothesize, interview, compute and use deductive reasoning to propose crime solutions. Using technology, students will record data, draw conclusions, and formulate the best method for communicating results of their investigations. Students will use what is actually happening in the community, country, and the world as its classroom and lab.

Anatomy and Physiology

Prerequisite(s): Biology and a second science credit
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

Anatomy and Physiology is a college preparatory course for students who plan to study and work in the health care field. Structure of the human body and the inter-working of all the systems will be investigated. A detailed study will be made of the cat anatomy and the application of these same systems to human anatomy. Field trips to local medical facilities and visiting speakers from several health care professionals will allow students to enter college with an understanding of the requirements for success in this career. This course is recommended for those students who are interested in careers as health professionals, athletic trainers, or those who have general interest in the biology of the human body.

SOCIAL STUDIES COURSE DESCRIPTIONS

World Geography Honors (Formerly known as PRE-AP)

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th
GPA Level: Level II

This course is a comprehensive study of geography and cultures that examines the interaction of land, people, and climates of selected regions of the world. Involvement in-group and individual research activities, outside readings, as well as problem solving activities are expected of students in this course. The course provides students the opportunity to study the interaction of people and their physical environments in the major areas of the world. It introduces the students to the world of geographers, their unique vocabulary, tools and methodologies. World Geography Honors offers students the opportunity to put into practice the various geographical concepts and skills related to our world.

World Geography

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th
GPA Level: Level I

World Geography includes the study of the five themes of geography as they relate to the physical and cultural geography of world regions. Students will study major landforms as well as political boundaries for every nation in the world. Students will learn about major world religions, governments, and economies, as well as general history of world regions. They will also study current events and relate world happenings to the five themes of geography. In addition, students will develop skills such as reading maps, graphs and charts.

World History AP

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th
GPA Level: Level III

World History AP is designed to give students an overview of the entire history of humankind. 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 systems. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which democratic-republican governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and political concepts. Students examine the history and the impact of major religious and philosophical traditions. Students analyze the connections between major developments in science and technology and the growth of industrial economics and use the process of historical inquiry to research, interpret, and use multiple sources of evidence. In addition to textbook reading assignments, the student will be expected to read primary source material such as excerpts from Hammurabi's Code of Law and The English Bill

of Rights. Research assignments will be given in which the student will be expected to write papers of analysis and opinion. This course will include student centered activities, lecture, and discussion as well as other numerous other learning activities.

World History

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th
GPA Level: Level I

World History provides an overview of human history from the earliest times to the present, with an emphasis on the study of significant people, events, and issues. Students will trace the development of western civilization, as well as other civilizations around the world. Students will be viewing and interpreting from various perspectives including historical, geographic, political economic, and cultural. Together, these perspectives can help students understand how the past has led to the present and to appreciate the individual's role in shaping the future. A study of contemporary world affairs is an essential part of the course.

US History AP

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 11th
GPA Level: Level III

United States History AP is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials-their relevance to a given interpretive problem, their reliability, and their importance. Students will also learn to weigh the evidence and interpretations presented in historical scholarship. This course develops the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. In addition to textbook reading assignments, the student will be expected to read primary source materials, including documents, essays, or books on special themes or topics. Research assignments will be given in which the student will be expected to write papers of analysis and opinion. The AP U. S. History course prepares students for the College Board AP Exam given each May, which offers the opportunity to earn college credit.

US History

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 11th
GPA Level: Level I

United States History completes the two-year study of American history that students began in Grade 8. The content of the high school course focuses on the political, economic, and social events that have shaped modern America. Students will study and interpret the period from various perspectives, including historical, geographic, political, economic, and cultural. Together, these perspectives can help students understand how the past has led to the present and to appreciate the role in shaping the future.

US Government AP

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 12th
GPA Level: Level III

U. S. Government AP provides an opportunity for secondary students to pursue and receive credit for college-level course work completed at the secondary school level. U.S. Government AP covers the equivalent of a one-semester college introductory course in United States government and will be taught like a traditional college course. Student interest in the material, as well as work ethic and success in previous AP courses, should be considered before enrolling in the course. Students should expect both objective testing as well as significant written evaluations. Higher level thinking skills will be emphasized. Students take the AP Exam in May for potential college credit.

US Government

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 12th
GPA Level: Level I

U. S. Government provides an opportunity to study the structure and function of American government and primarily focuses on the national level. The course provides introduction to state and local government responsibilities as well. Foundations and development of the American political system, comparative government, civic participation and current events will be covered. A thorough study of the United States Constitution is provided. The curriculum is designed to meet college-preparatory requirements.

Economics AP

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 12th
GPA Level: Level III

AP Macroeconomics gives students a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places particular emphasis on the study of national income and process determination, and also develops students' familiarity with economics performance measures, economic growth, and international economics. A course in AP Macroeconomics is challenging and stimulating, and compared to a regular economics course, requires a higher level of analytical skills. It also gives greater opportunity for individual progress, accomplishment, and goes into greater depth. The grade in this course is weighted to reflect the quality of work undertaken. AP Macroeconomics has no prerequisites, although it is recommended that students have completed Algebra II.

Economics

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 12th
GPA Level: Level I

Economics examines the American Free Enterprise economics system. The curriculum stresses basic economic laws such as the interaction of supply and demand and its role in determining the type and price of goods. Other units included in the curriculum deal with personal economics topics; taxes; business organizations; government spending; banking operations; factors of production; stock market; labor unions; personal financial literacy; and problems the economy faces today.

PHYSICAL EDUCATION/ATHLETICS COURSES

Fitness & Team and Individual Sports - Male

Prerequisite(s): N/A
Credit: ½ or 1.0
Grade Level: 9th – 12th
GPA Level: N/A

Foundations of Personal Fitness courses include basic conditioning, individual appraisal of each student's fitness level, and the teaching of skills necessary to participate in various team and individual sports. Emphasis is placed on learning "lifetime" sports and activities that can carry over into adult life.

Foundations Of Personal Fitness & Team and Individual Sports - Female

Prerequisite(s): N/A
Credit: ½ or 1.0
Grade Level: 9th – 12th
GPA Level: N/A

Foundations of Personal Fitness courses include basic conditioning, individual appraisal of each student's fitness level, and the teaching of skills necessary to participate in various team and individual sports. Emphasis is placed on learning "lifetime" sports and activities that can carry over into adult life.

Physical Education Equivalents

Prerequisite(s): Tryout
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: N/A

Male – Football, Basketball, Baseball, Soccer, Cross Country, Track, Golf, Swimming & Tennis

Female – Volleyball, Basketball, Softball, Soccer, Cross Country, Track, Golf, Swimming & Tennis

Cheer Dance I
Cheer Dance II
Cheer Dance III
Cheer Dance IV

Prerequisite(s): Tryout
Credit: 1.0 All Year (each)
Grade Level: 9th – 12th
GPA Level: N/A

LANGUAGES OTHER THAN ENGLISH COURSE DESCRIPTIONS

Spanish I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

Spanish gives the student the framework for verbal proficiency in daily, practical communication. Basic skills are developed in the 4 areas of language usage: listening, speaking, reading, and writing. Cultural aspects of the Hispanic world are introduced.

Spanish II Honors

Prerequisite(s): Spanish I
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level II

Spanish II Pre-AP is a course for students of above average ability who want the challenges of advanced studies in vocabulary, grammar, reading and listening comprehension in a foreign language and are willing to accept the additional responsibilities of the course work. Vocabulary acquisition and grammar continue to be a major focus throughout the year. Additionally, students will be required to use Spanish regularly to communicate ideas through speaking, listening, reading and writing. The pace of this course will be significantly faster than Spanish II. The teacher will spend a significant amount of time communicating in Spanish to students.

Spanish II

Prerequisite(s): Spanish I
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

The second course is a continuation of Spanish I with more advanced studies. Listening, speaking, reading and writing skills will be further developed. Cultural aspects of the Hispanic world will be expanded.

Spanish III Honors (Formerly known as PRE-AP)

Prerequisite(s): Spanish II
Credit: 1.0
Grade Level: 11th – 12th
GPA Level: Level II

The third level Pre AP course is a brief review of basic grammar and composition. Expansion of vocabulary and its use in conversation as well as advanced grammar concepts are studied. Composition and literature, Hispanic traditions and cultures, and Hispanic arts are studied more in depth.

Spanish III

Prerequisite(s): Spanish II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

The regular third level course is a review of grammar and composition learned in Spanish I and II with expansion of vocabulary and emphasis on conversation and writing. This course does not prepare a student for Spanish IV and V.

Spanish IV AP

Prerequisite(s): Spanish III Pre-AP
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

The fourth level course integrates the skills listening, speaking, reading, and writing. The class is conducted almost exclusively in Spanish. In the context of literature, including short stories and poems, we review advanced grammar and add extensively to the depth of our vocabulary. Students are expected to converse and discuss only in Spanish during the class.

German I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

This course is a continuation and expansion of German I. Students will study basic grammar, verb conjugation (present, preterit, future), and German vocabulary. Students will learn to read, write, speak, and understand sentences and conversations using vocabulary and grammar facts. Students will continue to study German culture, history, and geography of German speaking nations, as well as their political and economical importance in today's global world. Students will build upon their acquired knowledge of German by reading books, magazines, translations, conversations, writing assignments, plays, music, and art, in addition to vocabulary and grammar.

German II

Prerequisite(s): German I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

This course is a continuation and expansion of German I. Students will study basic grammar, verb conjugation (present, preterit, future), and German vocabulary. Students will learn to read, write, speak, and understand sentences and conversations using vocabulary and grammar facts. Students will continue to study German culture, history, and geography of German speaking nations, as well as their political and economical importance in today's global world. Students will build upon their acquired knowledge of German by reading books, magazines, translations, conversations, writing assignments, plays, music, and art, in addition to vocabulary and grammar.

German III Honors (Formerly known as PRE-AP)

Prerequisite(s): German II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level II

This course is a continuation of German studies, including cultural studies, literature, and more advanced grammar studies.

French I

Prerequisite(s): N/A
Credit: 10.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

French I is an introduction and study of the French language, French-speaking countries, and their cultures. The students will learn the basic grammar and vocabulary needed for reading, writing, and conversational skills. Audio-visual materials and tape recordings of native speakers are used. The course includes activities such as singing, skits, games, films and speakers. A student should have a good understanding of English grammar before beginning a foreign language.

French II

Prerequisite(s): French I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

French II is a continuation of French I with more advanced studies. It expands the cultural topics such as history, geography and French daily life.

French III Honors (Formerly known as PRE-AP)

Prerequisite(s): French II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level II

French III is a review of advanced French grammar and composition with broad expansion of vocabulary and emphasis on conversation. It includes reading and discussion of longer short story selections and an adaptation of a novel. Classes are conducted mainly in French.

FINE ARTS COURSE DESCRIPTIONS

Art I

Prerequisite(s): N/A
Credit: 1. 0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

This course is designed to introduce the student to the basic principles of art (line, value, texture, color, form, and space). It offers the opportunity for the student to explore techniques, media, and tools in designing, drawing, painting, printmaking, sculpture and some crafts. Emphasis is placed on creativity, expression, originality and development of an aesthetic judgment of art appreciation through art history. Students must take the first semester of Art I before they take the second semester.

Art II Honors

Prerequisite(s): Art I and Teacher Recommendation
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level II

These students are selected through teacher recommendation in the spring semester and must have completed Art I as a prerequisite. The class is designed for students who are serious about art, plan to major in art in college and plan to have a career in art. The scope of the class is broad and covers new processes, terminology, a variety of mediums, art history, art appreciation plus aesthetics. Emphasis is put on keeping an open, active, and creative outlook and on pursuing individual growth in art. Students are required to participate in local, regional and state art events and competitions.

Art II

Prerequisite(s): Art I
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

Art II offers a wide variety of drawing experiences that include: contour, gesture, figure, landscape, abstract, still life, concentrating on modeling and shading. The media are charcoal, pastel, pencil, ink, washes and mixed media. Painting includes watercolor and acrylic techniques with emphasis on color harmonies and composition (balance, unity, variety, emphasis, rhythm, movement). Block printing will be covered as well as beginning ceramics. Modern Art and "What's going on in the Art World today" is the emphasis in Art history. Filmstrips, videotapes, and trips to local museums are followed up by writing critiques on the students' work and work of other artists. Terminology and art vocabulary studied in this course is an important part of Art II.

Art II, Sculpture I

Prerequisite(s): Art I
Credit: 1.0 All Year
Grade Level: 10th- 12th
GPA Level: Level I

Art II Sculpture I, offers a wide variety of three dimensional art experiences. Students will create realist, abstract, and non-objective sculptures using a variety of techniques and media while expanding on their knowledge of the Art Elements and Principles and how they apply to three-dimensional work. Students will also discuss and explore how sculpture has evolved throughout history. Some of the media explored include recycled material, wire, fabric, ceramics, and more. Terminology and art vocabulary studied in this course is an important part of Art II and will continue to be used in future Art courses.

Art III Honors

Prerequisite(s): Art II Pre-AP and Teacher Recommendation
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level II

Students use new and mastered skills to create more ambitious artworks. Students work more independently and strive to find their own "voice" as artists. Students are required to compete in state and local competitions.

Art III

Prerequisite(s): Art II
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Art III course is an advanced art class with an emphasis on painting and three-dimensional art projects. The painting media consists of acrylic, watercolor, and mixed media on various surfaces. The emphasis is developing the student's "individual style." The students become acquainted with different styles and media and are encouraged to experiment, invent and transfer learning from one medium to another. The three-dimensional projects are collage, clay sculpture, plaster projects and found objects. Filmstrips, videotapes and trips to local museums are followed up by Art terminology and vocabulary studies in this course are an important part of Art III. Students are encouraged to compete in local competitions.

Art IV AP 2-D Art & Design/Photo Portfolio

Prerequisite(s): PAP Art IV & 10 pieces of art from previous courses – teacher recommendation from Commercial Photo
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

AP 2-D Art & Design focuses on creating a finished portfolio of photography and/or digitally based artworks and traditional artwork for submission to the AP Board. Students will spend the year producing a series of artworks/photos in a theme as well as classroom assignments to be considered for their final submission. Students are required to participate in at least one art competition during the year.
AP Photography Portfolio focuses on creating a portfolio of only photography based artworks. Students will spend the year producing a series of photos in a theme as well as classroom assignments to be considered for their final submission. Students are required to participate in at least one art competition during the year.

Art IV AP 3-D Art & Design

Prerequisite(s): Teacher recommendation from 3-D art instructor
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

AP Art 3-D Art & Design focuses on creating a portfolio of 3-dimensional artwork for AP submission. Students will spend the year producing a series of 3-D artwork in a theme as well as classroom assignments to be considered for their final submission. Students are required to participate in at least one art competition during the year.

Art IV AP Drawing

Prerequisite(s): PAP Art IV & 10 pieces of art from previous courses – teacher recommendation
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

AP Art Drawing focuses on creating a portfolio of traditional artwork for AP submission. Students will spend the year producing a series of traditional artwork in a theme as well as classroom assignments to be considered for their final submission. Students are required to participate in at least one art competition during the year.

Art IV Honors

Prerequisite(s): Art III Pre-AP and Teacher Recommendation
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level II

Students use new and mastered skills to create more ambitious artworks. Students work more independently and strive to find their own “voice” as artists. Students are required to compete in state and local competitions.

Art IV

Prerequisite(s): Art III
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

Students in Art IV are advanced art students and are expected to work independently with the assistance and aid of the art teacher. Art IV course is an advanced art class with an emphasis on painting, drawing and designing projects. The painting media consists of acrylic, watercolor, and mixed media on various surfaces. The emphasis is developing the student’s “individual style.” The students become acquainted with different styles and media and are encouraged to experiment, invent and transfer learning from one medium to another. Filmstrips, videotapes and trips to local museums are followed up by Art terminology and vocabulary studies in this course are an important part of Art IV. Students are encouraged to compete in local competitions.

Art History AP

Prerequisite(s): None
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level III

The course offers students interested in art and/or history the opportunity to explore in depth the history of art from ancient times to present. Through reading, research, PowerPoint presentations, videos, field trips and art activities students will view and analyze significant artwork from around the world. The goal is to familiarize and relate works of art to their proper cultural and historical origins and cultivate an appreciation of all art and styles. Students are encouraged to keep a notebook or journal of discussion on art periods and styles of specific artworks.

Technical Theater I / Construction Technology I *(Students will receive both credits for this course.)*
Technical Theater II
Technical Theater III
Technical Theater IV

Prerequisite(s): Tech Theater I, II, or III
Credit: 1.0 All Year (each)
Grade Level: 9th – 12th
GPA Level: Level I

This course is designed for the non-performing student that desires participation in all behind-the-scene phases of play production. Students will have hands-on experience in scenery construction, scenery painting, lighting, sound, costuming, make-up and more. These students are eligible to audition for crew positions for competition and non-competitive opportunities. Competition shows are governed by UIL eligibility rules. Serious performance-oriented students would also profit from this course by learning all facts of theater. Ticket sales are required for all PT theater students.

Theater Arts I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

This course presents an overview of theater arts. The first semester concentrates on performing techniques: pantomime, improvisation, voice, oral interpretation, play interpretation, structure, and performance. Members of this class will produce a short play that includes all facets of theater study. The second semester will focus on the historical development of drama and its impact on today's theater with emphasis on independent student research. Members of the class will also be participating in a variety of performing competitions, including UIL events, and will need to be passing all subjects for eligibility. Students must be enrolled in a theater class to participate in the UIL one act play. Students will travel to tournaments but outside preparation time will be kept at a minimum. Approximately three main stage performance opportunities are available to Theatre I.

Theater Arts II

Prerequisite(s): Theater Arts I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

In the first semester, the focus will be student-produced scenes and musical theater. Students will participate in several lab situations in each area of make-up, audition techniques, theatrical choreography. Students will be expected to continue their participating in performing skills through individual competitive events or school-produced plays. Recent history of theater and musical comedy format will be explored.
Spring semester continues the study of basic acting techniques. The complexity of acting situations will be increased according to student ability and desire. The course culminates in major roles of the competition UIL one-act play performances. Only students of the advanced class will be considered for major OAP roles with minor roles open to any theater student. Students are expected to continue their participation in competitive and performing events and will need to be eligible according to UIL standards. Students will travel to tournaments but outside preparation time will be kept at a minimum. Approximately five main state performance opportunities are available per year to advanced students. Second year material will alternate with third year material as long as the two courses are combined. Advanced Theater students will need to purchase a specified theatrical make-up kit for their personal use.

Theater Arts III

Prerequisite(s): Theater Arts II
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

The student will cover the problems of directing and acting, the director-actor relationship, and the problems of play analysis. Individual research of several plays is stressed. The students will work on play composition, culminating in student-produced scenes. A focus on college scholarships will be featured. Again, students will be participating in competitive performance situations and must remain eligible. The one-act play for UIL competitions limited to major roles being enrolled in the advanced theater classes. Students will travel to tournaments but outside preparation time will be kept to a minimum. Approximately five main stage performance opportunities are available per year to advanced students. Third year material will alternate with second year work.

Theater Arts IV

Prerequisite(s): Theater Arts III
Credit: 1.0 All Year
Grade Level: 12th
GPA Level: Level I

This is the most advanced level of theater arts that can be taken. Students interested in this class must have been enrolled in three years of theater, plan to pursue a career in a theater related profession, and participate in multiple competitions (individually and en masse). One of the highlights of this course will be preparation and participation in college scholarship auditions. Students will need to be eligible academically in order to participate in any area of advanced theater.

Dance I
Dance II
Dance III
Dance IV
Prerequisite(s): Dance I
Credit: 1.0 All Year (each)
Grade Level: 10th – 12th
GPA Level: N/A
Dance is offered as a fine arts credit. These classes are available to any high school student who wishes to explore different dance styles and techniques through dance history and various dance exercises. Units on ballet, jazz, tap, modern and folk dance provide the student many opportunities to develop self-confidence and an appreciation for using their body as an expressive instrument. Both semesters of dance must be taken to count as a fine arts credit.

Dance I Drill Team
Dance II Drill Team
Dance III Drill Team
Dance IV Drill Team
Prerequisite(s): Tryout
Credit: 1.0 Credit All Year (each)
Grade Level: 9th – 12th
GPA Level: N/A
The purpose of the Precision is to encourage quality performance, academic standards, loyal school spirit and high personal values among its members. Through the development of dance technique, leadership, cooperation, self-discipline and sportsmanship in each individual member, the Precision will fulfill its purpose for Pine Tree High School and the community. The team performs at sporting events, community functions and produces a complete stage production in the spring. Members are chosen through a tryout procedure in the spring. Both semesters of dance/drill team count as fine arts credit.

Band I
Band II
Band III
Band IV
Prerequisite(s): Band I – Audition Band II – Band I Band III – Band II Band IV – Band III
Credit: 1.0 All Year (each)
Grade Level: 9th – 12th
GPA Level: N/A
The marching band performs specialized maneuvers that require memorization of music, physical coordination, and a spirit of cooperation at football halftimes. The students develop a high degree of technical ability and musicianship plus good discipline, and a respect for authority. In the second semester, the total group is separated into a Symphonic and a Concert Band. These groups work independently to prepare music for playing contest. The students will be expected to spend time outside of the school day in practice and will have to maintain passing grades in all classes to remain eligible. The student is expected to keep the horns, uniforms, and music, which the school furnishes, in good condition. The fall semester of band counts as ½ credit of P.E. equivalent. The spring semester of band counts as ½ credit of fine arts credit.

Jazz Band I
Jazz Band II
Jazz Band III
Prerequisite(s): Audition
Credit: 1.0 All Year (each)
Grade Level: 9th – 12th
GPA Level: N/A
This course will study the various styles of Jazz music. Students will learn and perform jazz styles such as Dixieland, Be Bop, Swing, Big Band, Samba, Bossa Nova, Reggae, and Funk styles of music. The course will also cover analysis of jazz chords, notation, and improvisation techniques. There are a number of performance opportunities and competition performances in this course. Students taking this class must be members of the Pine Tree High School Band.

Concert Choir I
Concert Choir II
Concert Choir III
Concert Choir IV
Prerequisite(s): Choir I – None Choir II – Chorale I Choir III – Choir II Choir IV – Choir III
Credit: 1.0 All Year (each)
Grade Level: 9th – 12th
GPA Level: N/A
Concert Choir is an un-auditioned choir. Participation in UIL and TMEA activities is optional with the exception of UIL Concert and Sight-Reading Choir Contest. Students are required to maintain academic eligibility and good attendance records. ***Members are required to perform in 4 concerts throughout the year.***

Chorale Choir I
Chorale Choir II
Chorale Choir III
Chorale Choir IV
Prerequisite(s): Chorale Choir I – Audition/Director Referral Chorale Choir II - Audition/Director Referral Chorale Choir III - Audition/Director Referral
Credit: 1.0 All Year (each)
Grade Level: 9th – 12th
GPA Level: N/A
PT Chorale Choir is a varsity choir for grades 10-12 that is determined by audition with the representation of the group resulting in a balanced choral ensemble. Participation in individual UIL and TMEA activities is optional with the exception UIL Concert and Sight-Reading Choir Contest. Students are required to maintain academic eligibility and good attendance records. PT Chorale Choir students are required to perform in 4 concerts throughout the year (Fall Dinner Theater, Winter Concert, UIL Concert and Pop concert) and throughout the community at various times during the year. Student members are provided with the opportunity to participate in the TMEA All-State Choir process beginning with All-Region in the fall. They are also provided the opportunity to participate in UIL Solo and Ensemble Contest in February. Students are taught advanced choral and vocal repertoire from the UIL Prescribed Music List. They learn about choral balance, blend, quality vocal production, and sight singing.

PT Express I
PT Express II
PT Express III
PT Express IV

Prerequisite(s): Audition
Credit: 1.0 All Year (each)
Grade Level: 9th – 12th
GPA Level: N/A

PT Express is a Varsity choir of both Men (9-12 grade) and Women (10-12 grade) that is determined by audition with the representation of the group resulting in a balanced choral ensemble.
Participation in UIL and TMEA activities is required. A student must remain academically eligible every six weeks in order to remain in PT Express. PT Express performs throughout the community at various times during the year. They are required to perform in 4 concerts throughout the year (Fall Dinner Theater, Winter concert, UIL Concert and Pop Concert.) Student members are provided with the opportunity to participate in the TMEA All-State Choir process beginning with All-Region in the fall. They are also provided the opportunity to participate in UIL solo and ensemble contest in February, and UIL Concert and Sight-reading Choir Contest in April. Students are taught advanced choral and vocal repertoire from the UIL Prescribed Music List. Students will also be required to attend after school rehearsal and activities. They will learn about choral balance, blend, quality vocal production, and sight singing.

Floral Design

Prerequisite(s): N/A
Credit: 1. 0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

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.

OTHER ELECTIVES COURSE DESCRIPTIONS

Introduction to Unmanned Aerial Vehicles Flight – Drones

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course is designed to prepare students for entry-level employment or continuing education in piloting UAV operations. The course instructs students in UAV flight navigation, industry laws and regulations and safety. Students are also exposed to mission planning procedures, environmental factors and human factors involved in UAV history. The goal of the course is to prepare students to take the licensing exam for FAA Drone Pilot's License. Any expenses relating to the testing fees or test administration will be the responsibility of the student. Students must be 16 years of age to set for the exam and receive their FAA Drone Pilot's license.

AP Computer Science Principles

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rich curriculum that aims to broaden participation in computer science.

AP Computer Science

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level III

Computer science embraces problem solving, hardware, algorithms and perspectives that help people utilize computers to address real-world problems in contemporary life. As the study of computer science is evolving, the careful design of the AP Computer Science course and exam continues to strive to engage a diverse student population, including female and underrepresented students, with the rigorous and rewarding concepts of computer science.

Professional Communication

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 9th – 12th
GPA Level: Level I

Communication Applications, a semester-long course, is designed to introduce the student to effective communication. The student will study communication as a process with consideration to self as communicator

and the importance of communication in the group processes. Students will develop better listening skills, study problem-solving strategies, and perfect professional communication skills, including preparation of job interviewing skills.

Psychology AP

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 10th – 12th
GPA Level: Level III

This College Board approved course will be a more in-depth look into Psychology as it explains why people act, think, and feel as they do. There is a great deal of group participation/class interaction planned into its structure. Basic purposes of this course are to help young people begin to better understand themselves (why they do what they do) and others and to learn to relate to others (peers, adults, parents) in a more effective way. In addition, strong emphasis is given to helping young people learn how to cope with the pressures of modern living and how to make constructive choices for their lives. Students will be required to set for the A.P. exam at the end of the course.

Psychology

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 9th – 12th
GPA Level: Level I

Psychology explains to some extent why people act, think, and feel as they do. There is a great deal of group participation/class interaction planned into its structure. Basic purposes of this course are to help young people begin to better understand themselves (why they do what they do) and others and to learn to relate to others (peers, adults, parents) in a more effective way. In addition, strong emphasis is given to helping young people learn how to cope with the pressures of modern living and how to make constructive choices for their lives.

Sociology

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 9th – 12th
GPA Level: Level I

Sociology provides opportunities for students systematically to study individuals, groups, and their basic institutions. Content is designed to give students insights into the ways sociologists work and how their knowledge, methods, and theories are applied to study human actions and relationships. Students will study such major social problems as suicide, divorce, crime, and poverty. The socialization process will also be examined.

Kinesiology I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

This course provides an opportunity for the study and application of the components of sports medicine including but not limited to: sports medicine related careers, organizational and administrative considerations, prevention of athletic injuries, recognition, evaluation, and immediate care of athletic injuries, rehabilitation and management skills, taping and wrapping techniques, first aid/CPR/AED, emergency procedures, nutrition, sports psychology, human anatomy and physiology, therapeutic modalities, and therapeutic exercise.

Kinesiology II

Prerequisite(s): Kinesiology I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

This course is a continuation of foundations learned in Kinesiology I with emphasis on applying techniques with more "hands-on" opportunities.

PALS I

PALS II

Prerequisite(s): ***Teacher/Counselor/Administrator Recommendation***
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: N/A

PALS stands for Peer Assistance & Leadership. PALs members learn about mentoring and how to work with younger PTISD students. PALs gain knowledge through a variety of training and hands-on experience. Once PALs have gone through training they work one on one with a younger PTISD student as a mentor. PALs courses use the potential of youth to make a difference in their lives, schools and communities. PALs recognizes an innate capacity for social understanding, personal well-being, and community participation within every student. PALs nurtures and builds capacities to help youth increase resiliency and build protective factors to help them achieve school and social successes which lead to a productive life.

Leadership I
Leadership II

Prerequisite(s):
Sponsor/Administrator Recommendation
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: N/A

The purpose of Leadership is to provide an open forum for discussions and activities that promote school spirit, promote leadership and fellowship training, promote the respect of authority and individual rights, promote an environment where all students feel safe and enjoy attending PTHS and encourage student responsibility in maintaining the traditions and ideas of the school. Leadership is carried out through the following committees: Community Service, DASH (Drug, Alcohol, Safety, & Health), Energy & Environment, Pride & Patriotism and other committees to be named as needed throughout the year.

UIL Math - 9th
UIL Math - 10th
UIL Math - 11th
UIL Math - 12th

Prerequisite(s): Teacher Approval
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level II (9th-11th)
Level III (12th)

In the independent math study class, a wide variety of topics are explored. While prior knowledge and familiarity with mathematics help to form the foundation, the solutions to the application problems require in-depth analytical and deductive reasoning. The critical thinking skill of synthesis is necessary to connect the theorems of math together to form solution strategies. These strategies are not memorized-they are distinctly devised according to the parameters of a given problem situation. The skill at choosing which strategy would be most efficient is actively refined through practice and discussions with other students. The instruction as well as the evaluation is differentiated according to the grade level of the student. Freshmen and sophomores are not expected to have the same expertise as juniors or seniors. Their level of class would be comparable to a Pre-AP course that prepares students for the AP level. The expectation as well as the evaluation of the level of performance for the juniors and seniors is set at the Advanced Placement level. These upper level students are expected to mentor other class members. In having to explain a problem to others, the student actually retains how to structure that particular solution strategy. Mental math agility is one of the key areas of development of the class. Through the study of number theory, students become familiar with characteristics of numbers that aid in quick computations. Classification of a number as composite or prime, abundant, perfect, or deficient, happy or cheery, or palindromic is just a few of the ways a student gains insights about types of numbers. Set theory and change of bases are also topics that enable students to grow in their speed of mental math as well as just becoming more cognizant and curious about the beauty of numbers. Topics of discrete mathematics such as permutations, combinations, probability, and compound events probability are taught. Pick's theorem and Descartes' Theorem for area are also utilized in problem solving situations. The depth of the applications of algebraic and geometrical theorems exceeds the regular level of typical problems. Emphasis is on solid and analytical geometry. The theorems are used to investigate aspects of detailed drawn figures and as well as for analysis of word descriptions of geometrical situations. Trigonometry is actively used as a part of the solution strategy in many of these applications. Many Algebra II topics are also intertwined with these trigonometric identities and theorems. Conics, logarithms, exponentials, matrices, and systems are taught, reviewed, or

extended depending on the difficulty of the problem and on the grade level of the students. The course also encompasses the use of derivatives and integration from calculus to work application problems.

SAT / ACT Prep

Prerequisite(s): N/A
Credit: 0 – Local Credit Only – One Semester Course
Grade Level: 10th – 12th
GPA Level: Not Calculated In GPA
This course is designed to provide students the opportunity to learn more about the ACT and/or SAT college entrance exams and to help prepare them for success on those assessment instruments.

UIL English Language, Literature & Writing

Prerequisite(s):
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: 0
In this independent English study class, a wide variety of topics are explored. While prior knowledge from topics covered in English Language Arts classes form the foundational skills needed to succeed in this course, the responses to the application prompts require sophisticated analysis using historical, current, and social context, both literary and rhetorical devices, and linguistic etymology. The focus of writing constructs require the student to read extensively from a variety of genres (novel, drama, poetry, literary nonfiction, essays, speeches, letters) including British, American, and other world literature. Students study literary tropes and schemes, literary patterns, influences upon authors, characteristics of eras as applied to literature, using these to analyze theme, characterization, and author's purpose. Juniors and seniors are expected to recognize more subtle literary and rhetorical patterns and explain these to underclassmen. Research skills will also be covered including inquiry, the use of primary and secondary sources, electronic and other media sources, and crafting of perspective. Students will also gain knowledge of self-publishing and submitting to a third party for publication. In addition, students will study purposeful use of rhetorical strategies and patterns of organization studied in advanced writing courses such as use of diction, syntax, tone, and details in order to appeal to a variety of audiences and purposes. Linguistic study includes applying knowledge of etymology and word patterns from foreign and archaic languages to apply meanings in context. Both vocabulary and spelling patterns are studies as is use of other diacritical markings. **Participation in UIL competitions will be required. These events are held on Saturdays periodically throughout the school year.**

UIL Social Studies & Current Events

Prerequisite(s):
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: 0
In this independent humanities course, students will study a variety of topics covered in humanities courses. Students will explore themes and eras of world history and apply concepts to make inferences about systemic patterns of civilizations.
Current Events gives students the opportunity to investigate and analyze events happening in the world around them. Topics include: War and conflict, international and domestic events, global and domestic economics, science, technology, the environment, as well as local/state news. Students will be expected to answer multiple choice questions over world issues and events, as well as write an

essay that addresses one of the most pressing issues of the time. **Participation in UIL competitions will be required. These events are held on Saturdays periodically throughout the school year.**

Yearbook I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: N/A

Desktop Publishing is designed to focus on the study of technology applications foundations, including technology-related terms, concepts, and data input strategies; students learn to make informed decisions about technologies and their applications. The final product is a yearbook. Students communicate information in different formats and to diverse audiences.

Yearbook Production II
Yearbook Production III

Prerequisite(s): Teacher Recommendation and Yearbook I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: N/A

Yearbook Production I, II, III is designed for mature, dependable students who want to learn and practice the principles of yearbook production. Emphasis will be placed on the creative, mechanical, managerial, and business functions relating to the production of a major publication such as a yearbook. Students will be given the opportunity to use the various skills in the actual production of the high school yearbook. Enrollment in this course is limited to those students who are selected on the basis of scholastic achievement; dependability; interest in yearbook production; ability to work with others, as well as independently; and willingness to work after school to meet deadlines.

Photojournalism

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 9th – 12th
GPA Level: Level I

Students use digital cameras to maximize the quality of their pictures by learning how to use shutter speed and lens openings to improve exposure and composition. Hands-on instruction with a variety of cameras from oatmeal box pinhole cameras, SLR, and digital cameras will enable students to comprehend the photo-taking ability of each. Students will learn how to apply special effects in the camera, how to transfer photos from camera to computer and enhance the appearance of them by using Adobe PhotoShop. Photos may be put on display; used in contests; emailed to the PTISD website for public relations use; or printed in a publication.

Advanced Photojournalism

Prerequisite(s): Photojournalism
Credit: ½ One Semester
Grade Level: 9th – 12th
GPA Level: Level I

The course provides opportunities for students to apply their knowledge of camera usage, composition and exposure to shooting photos with digital cameras. Advanced techniques are taught such as double exposures, multiple images, collages, toning and use of various filters to manipulate the images on the computer. Students also use scanners to copy photos into a publication. Students will be required to buy some photo supplies.

Debate I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

Debate II
Debate III
Debate IV

Prerequisite(s): Previous Debate Credit
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Debate is a communications course designed to help students improve their argumentation and persuasion skills***. All students in this class are expected to compete in tournaments and attend workshops to help master the skills offered in this class.*** Students will learn and participate in the following UIL speaking events. Lincoln-Douglas Debate –Individual debate that argues established values. Cross-Ex Debate – team debate that argues policy. Informative Extemp-Speaking event – an individual has 30 minutes to prepare an informative speech Persuasive Exempt-Speaking event –An individual has 30 minutes to prepare a persuasive speech

Career Preparation I

Prerequisite(s): N/A
Credit: 2 – 3 All Year
Grade Level: 11th – 12th
GPA Level: Level I

Career Preparation II

Prerequisite(s): Career Preparation I
Credit: 2 – 3 All Year
Grade Level: 12th
GPA Level: Level I

These courses provide opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students secure and keep a job during the entire school year, which is evaluated by the classroom instructor and work supervisor. Students must be at least 16 years old, have good attendance, and provide their own transportation. *To remain in this class, a student must be employed for a minimum of ten hours per week at an approved training station within fifteen days of the beginning of the course*. Failure to keep a job will result in removal from the course and program at semester and credit will not be received. In the classroom, students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career Preparation is a relevant and rigorous course that effectively prepares students for college and career success. The OSHA CareerSafe 10-Hour certification course will be offered in this course. Students enrolled in Career Preparation are subject to random drug testing.

General Employability Skills

Prerequisite(s): Placement Into Course
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

This course provides students with knowledge of the prerequisite skills for general employment as well as the means of obtaining those skills. Employability skills include fundamentals of maintenance of personal appearance and grooming. The course also includes the knowledge, skills, and attitudes that allow employees to get along with their co-workers, make important work-related decisions, and become strong members of the work team. Discovering job possibilities that link skills, abilities, interests, values, needs, and work environment preferences is a part of the process of obtaining employability skills and abilities and is experiential learning that takes place over time.

ARCHITECTURE & CONSTRUCTION COURSE DESCRIPTIONS

Principles of Construction

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

This course is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment. At the completion of this course students will sit for the National Center for Construction Education & Research (NCCER) Core certification exam. This certification will open the door to future certifications and career opportunities.

Construction Management I

Prerequisite(s): Principles of Construction
Credit: 2.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

In Construction Management I, students will gain knowledge and skills needed to enter the workforce as apprentice carpenters or building maintenance supervisors' assistants or to build a foundation toward a postsecondary degree in architecture, construction science, drafting, or engineering. Construction Management I includes the knowledge of design techniques and tools related to the management of architectural and engineering projects.

Construction Management II

Prerequisite(s): Construction Management I
Credit: 2.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

In Construction Management II, students will gain knowledge and skills needed to enter the workforce as apprentice carpenters or building maintenance supervisors' assistants or to build a foundation toward a postsecondary degree in architecture, construction science, drafting, or engineering. Construction Management II includes knowledge of the design, techniques, and tools related to the management of architectural and engineering projects.

ARTS, AV, TECHNOLOGY & COMMUNICATION COURSE DESCRIPTIONS

Animation I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th -12th
GPA Level: Level I

Students taking Animation should have a desire to learn storyboarding, 2-D figure drawing, claymations and stop motions. Careers in animation span all aspects of motion graphics. 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 history and techniques of the animation industry. Students will have the opportunity to participate in area, regional and state competitions.

Animation II

Prerequisite(s): Animation I
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

Advanced Animation allows students to apply their knowledge of animation to complete fully developed projects. All students will have the opportunity to further their progression by learning acting techniques, lip sync, advanced walk/run/jump cycles, rigging 2D characters using bones tools, and special effects (smoke, fire, fog). Students may also have an opportunity to explore other related areas including motion graphics, visualizations, interactive applications, and game simulations. Students will have the opportunity to participate in area, regional and state competitions.

Audio Video Production I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Video Production is hands-on course in which students will learn the foundations of video production from the preproduction phase through post-production, including essential knowledge of copyright laws and ethical issues in media. In large part, students will learn the software and skills
necessary to create audio, photo, and video projects, and how to combine them to create polished multimedia pieces.

Audio Video Production II

Prerequisite(s): Audio Video Production I
Credit: 2.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course requires a block of 2 class periods. Careers in audio and video technology and film production span all aspects of the audio-video communications industry. Within this context, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production audio-video activities.

Practicum - Audio Video Production

Prerequisite(s): Audio Video Production II & Lab
Credit: 2.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course requires a block of 2 class periods. A continuation of Advanced Audio Production – focusing on student created productions.

Commercial Photography

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

Photography is a foundation course that teaches the elements and principles of design. A variety of media are incorporated as students learn the basics of photography – framing, light, and other techniques.

Graphic Design & Illustration I

Prerequisite(s): *N/A*
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Careers in Graphic Design and Illustration span all aspects of the advertising and visual communications industries. Within this course, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design. Commercial art concepts and design strategies will be explored and students will be given the opportunity to create posters, self-portraits, and logos, just to name a few. They will use industry standard software such as: Adobe Photoshop, Adobe Illustrator, and Adobe In Design. They will also use various types of hardware such as cameras and Wacom tablets. Students will have the opportunity to participate in area, regional and state competitions.

Graphic Design & Illustration II

Prerequisite(s): Graphic Design & Illustration I
Credit: 2.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course is a continuation of Graphic Design and Illustration 1. Careers in this area span all aspects of the advertising and visual communications industries. In addition to developing the advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will prepare for the Adobe certifications tests, create graphic and print projects for community and school organizations, visit local printing and advertising firms, and research and visit schools for advanced training in graphic design and illustration. Additional Adobe certifications will be offered during this course. Students will have the opportunity to participate in area, regional and state competitions.

Video Game Design

Prerequisite(s): N/A
Credit: 2.0 All Year
Grade Level: 12th
GPA Level: Level I

Video Game Design will allow students to explore one of the largest industries in the global marketplace and the new emerging careers it provides in the field of technology. Students will learn gaming, computerized gaming, evolution of gaming, artistic aspects of perspective, design, animation, technical concepts of collision theory, and programming logic. Students will participate in a simulation of a real video game design team while developing technical proficiency in constructing an original game design.

Practicum In Graphic Design & Illustration

Prerequisite(s): Graphic Design & Illustration II & Lab
Credit: 2.0 All Year
Grade Level: 12th
GPA Level: Level I

This course requires a block of 2 class periods. This course is recommended for students who have completed Advanced Graphic Design and Illustration. This course is meant to serve students interested in further development of a professional portfolio in addition to further development of skills and technical knowledge in the Arts, A/V Technology and Communications career cluster. Students will be expected to further develop knowledge and awareness of the industry of graphic design and illustration. Instruction may be delivered through lab-based classroom experiences and/or career preparation opportunities, and repair apparel, as well as plan and maintain a wardrobe. Quality construction will be emphasized.

BUSINESS ADMINISTRATION & MANAGEMENT COURSE DESCRIPTIONS

Principles of Business, Marketing & Finance

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

In Principles of Business, Marketing & Finance students learn about economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students also gain a basic understanding of money and personal financial management. The engaging learning activities and simulations in this course provide a foundation for future Business and Marketing courses. Students are encouraged to participate in DECA.

Business Law

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

In Business Law students analyze the social responsibility of business and industry regarding the significant legal issues related to these areas. Areas of study include business ethics, torts, contracts, negotiable financial instruments, personal property, sales, warranties, business organizations, concept of agency and employment, and real property. They incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical and international dimensions of business to make appropriate business decisions. This is an excellent course for students planning to pursue a business or law degree in college or who plan to operate his/her own business in the future. Students are encouraged to participate in DECA.

Business Management

Prerequisite(s): Last Course in Business Management P.O.S.
Credit: 1.0 All Year
Grade Level: 12th
GPA Level: Level I

In this course students analyze the primary functions of management and leadership in this rapidly evolving global business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate management decisions.

Entrepreneurship

Prerequisite(s):
Credit: 1.0 All Year
Grade Level: 10th - 12th
GPA Level: Level I

In this course students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to 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 the feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services.

EDUCATION & TRAINING COURSE DESCRIPTIONS

Human Growth & Development

Prerequisite(s): N/A
Credit: 1 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Human Growth and Development is an examination of human development across the lifespan with emphasis upon research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The study begins with prenatal development for a human being and spans through aging adults. With the population living longer, it is predicted there will exist major needs for jobs in all areas of geriatrics. This is an excellent course for students pursuing careers in education, health care, counseling and social work. Students are encouraged to participate in the FCCLA leadership organization.

Principles of Education

Prerequisite(s): N/A
Credit: 1 All Year
Grade Level: 9th – 12th
GPA Level: Level I

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.

Instructional Practices

Prerequisite(s): N/A
Credit: 2.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Instructional Practices in Education and Training is a field-based 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 direct supervision of a Family & Consumer Sciences teacher and a teacher from grades Pre-K through 6th. Thus time will be spent in the high school classroom and at other PTISD sites. Students will learn to plan and direct individualized instruction and group activities, develop and prepare instructional materials, develop materials for educational environments, assist with record keeping, and other teacher responsibilities. Students are encouraged to participate in the FCCLA leadership organization.

Practicum in Education & Training

Prerequisite(s): Instructional Practice in Education & Training
Credit: 2.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course requires a block of 2 class periods. This course is a continuation of a field-based internship that provides students with background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. This course explores education requirements for teachers, the relationship of teachers to administrators, and the relationship of the school to the community on a more in-depth basis.

FINANCE COURSE DESCRIPTIONS

Accounting I

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

Students in this course will learn to record and interpret financial information through accounting terminology, the use of the accounting equation, and the basic steps in the accounting cycle. Students also learn to formulate and interpret financial information for use by management. Sole proprietorships, partnerships and corporations are studied within the context of accounting. Because financial information often drives decisions in most organizations, this course is ideal for any student who is planning to obtain a business degree in college or operate his/her own business in the future. Additionally, students can participate in Accounting UIL competitions. Students are also encouraged to participate in DECA. This course is eligible for statewide articulated credit. Students can earn a Precision certificate in this course.

Accounting II

Prerequisite(s): Accounting I – This course may count as a 4th mathematics credit for graduation.
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Students continue the investigation of the field of accounting in this advanced course, emphasizing corporate accounting and integrated financial analysis. Students will engage in various managerial and cost accounting activities and learn to formulate and interpret financial information for use in management decision-making. In addition to traditional manual accounting methods, students are introduced to computerized accounting software that will prepare them for accounting in the workforce. This course is vital for students planning to major in finance or business in college or who are seeking an entry-level position in accounting. Students can also participate in Accounting UIL competitions. Students are also encouraged to participate in DECA. Students can earn a Precision certificate in this course. This course can also count as s student's fourth math course.

HEALTH SCIENCE COURSE DESCRIPTIONS

Principles of Health Science

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

This course provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems for the healthcare industry. 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. This course is recommended for students who are interested in a career in the health science field.

Health Science Theory

Prerequisite(s): Principles of Health Science & Biology
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

This course explores the healthcare industry and requirements for entry into health careers. The content relates to the organization of health care, patient relationships, working environments, and ethical and legal responsibilities. Students will also identify the employment opportunities, technology, and safety requirements of the healthcare industry. Students will have hands-on experiences for continued knowledge and skill

Anatomy & Physiology

Prerequisite(s): Biology & a second science
Credit: 1.0 All Year
Grade Level: 10th - 12th
GPA Level: Level I

This course can count for a student's 4th Science credit. This course studies the relationship between the structure and function of the human body. Principles of biochemistry, tissue structure, and homeostasis are emphasized and used as a background for the understanding of later concepts covered in each of the major body systems. Dissections and lab practicals are required and are an integral part of this class. Independent research projects are required during this course. This course is intended for students who are interested in a career in the healthcare field.

Medical Microbiology

Prerequisite(s): Biology & Chemistry
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course can count for a student's 4th Science credit.

Students in Medical Microbiology will study the relationships of microorganisms to wellness & disease. They will explore the microbial world by studying such topics as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. This course is intended for students who are interested in a career in the healthcare field.

Forensic Science

Prerequisite(s): Biology & Chemistry
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

Forensic science is an interdisciplinary science course that uses the principles of biology, anatomy, chemistry, physics, earth science, and the arts to solve crimes using scientific knowledge and reasoning. Students will incorporate the use of technology, communication skills, language arts, art, and mathematics to interpret crime scenes and solve crimes. Students will be asked to read, research, hypothesize, interview, compute and use deductive reasoning to propose crime solutions. Using technology, students will record data, draw conclusions, and formulate the best method for communicating results of their investigations. Students will use what is actually happening in the community, country, and the world as its classroom and lab.
human anatomy and physiology, therapeutic modalities, and therapeutic exercise.
with more "hands-on" opportunities.

Health Science Practicum - Pharmacy Tech

Prerequisite(s): Principles of Health Science, Health Science Theory, Biology, Chemistry and Application
Credit: 2.0 All Year
Grade Level: 12th
GPA Level: Level I

This two-semester course prepares students for employment as a Certified Pharmacy Technician (CPhT), and covers the skills needed for the pharmacy technician field. Through direct instruction, interactive skills demonstrations, practice assignments, and face-to-face laboratory exercises, students learn the basics of pharmacy assisting, including various pharmacy calculations and measurements, pharmacy law, pharmacology, medical terminology and abbreviations, medicinal drugs, sterile techniques, USP 795 and 797 standards, maintenance of inventory, patient record systems, data processing automation in the pharmacy, and employability skills. Successful completion of this course prepares the student for national certification for employment as a Certified Pharmacy Technician.

Health Science Practicum – Certified Medical Assistant

Prerequisite(s): Principles of Health Science, Health Science Theory, Biology and Application
Credit: 2.0 All Year
Grade Level: 11th - 12th
GPA Level: Level I

This is an advanced level capstone course in the Health Science Program of Study at PTHS. Students in this course will learn about the medical field through multiple experiences in the classroom. Students must set aside 2 class periods set aside for participation in these courses.

Health Science Practicum – Clinical Observation Program

Prerequisite(s): Principles of Health Science, Health Science Theory, Biology and Application
Credit: 2.0 All Year
Grade Level: 12th
GPA Level: Level I

This is an advanced level capstone course in the Health Science Program of Study at PTHS. Students in this course will learn about the medical field through multiple experiences in both the classroom and clinical settings. Students choose the medical specialty they wish to pursue and are placed in various hospitals and clinics throughout the city. Students must set aside 2 class periods set aside for participation in these courses.

HEALTH SCIENCES @ PTHS

Health Science is a growing field of need locally, regionally, and nationally. Jobs in the field of Health Science are projected to be the leading employer in the Gregg County, Texas area for years to come. Pine Tree High School's Health Science programs are one of the most unique and comprehensive high school courses of study anywhere east of the DFW Metroplex, preparing students to pursue a variety of Health Science careers.

Students in our program can choose from several career paths that include regular classes, dual credit, practicum, and industry-recognized certifications.

Students can choose from any of the following courses and paths that can be individually tailored to meet the needs of each student based on future goals. Any of the Health Science tracks listed below can be customized with other career programs such as business or human services to provide a well rounded course of study.

Additionally, PTHS offers several science-related CTE courses within the Health Science tracks to meet the unique needs of each learner. We have recently added our sports medicine program to the Health Sciences track to provide an additional avenue for students interested in that field. Please see specific programs of study contained in the PTHS Course Catalog for more details on exact sequencing.

PTHS HEALTH SCIENCE Certification Programs

The following Senior Level programs offered at PTHS and allow students to obtain the following certifications:

* Certified Clinical Medical Assistant (CCMA)--NHA
* EKG Technician (CET)--NHA
* Phlebotomy Technician (CPT)--NHA
* Pharmacy Technician (CPhT)--NHA

The following programs are available to PTHS students who are working to complete the Health Science Program of Study: Choice to choose one or two of the double blocked programs during Senior school year if schedule allows and student meets all of the requirements below.

Health Science Clinical Practicum (Seniors Only)

Practicum II in Health Science – Clinical Observation Class & Practicum

Practicum Requirements

- 3.5 overall GPA – unweighted
- No more than 4 unexcused absences in previous grade
- No discipline referrals resulting in ISS, suspension, or alternative placement in the past two school years
- Recommendation letter(s)

Prerequisites: Principles of Health Science, Health Science Theory/Medical Terminology, Anatomy & Physiology/Medical Microbiology/Forensics/Sports Medicine.

To pursue observational experience in a clinical setting under the supervision of health care personnel and licensed instructors. The student will learn by observing, journaling their observations and by defining personal learning outcomes from their experience. Students earn 36-44 clinical hours per semester and 30 volunteer hours.

Certified Clinical Medical Assistant (CCMA) / EKG Technician (CET) / Phlebotomy Technician (CPT) (SENIORS ONLY) 3 Certifications one double blocked class

Practicum I in Health Science – Certified Clinical Medical Assistant (CCMA) Class & Practicum

Practicum Requirements

- 3.5 overall GPA – unweighted
- No more than 4 unexcused absences in previous grade
- No discipline referrals resulting in ISS, suspension, or alternative placement in the past two school years
- Recommendation letter(s)

Prerequisites: Principles of Health Science, Health Science Theory/Medical Terminology, Anatomy & Physiology/Medical Microbiology/Forensics/Sports Medicine.

Pharmacy Technician Practicum (SENIORS ONLY)

Practicum in Health Science – Pharmacy Technician Class & Practicum

Practicum Requirements

- 3.5 overall GPA – unweighted
- No more than 4 unexcused absences in previous grade
- No discipline referrals resulting in ISS, suspension, or alternative placement in the past two school years
- Recommendation letter(s)

Prerequisites: Principles of Health Science, Health Science Theory/Medical Terminology, Anatomy & Physiology/Medical Microbiology/Forensics/Sports Medicine.

HOSPITALITY & TOURISM COURSE DESCRIPTIONS

Introduction to Culinary Arts

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

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

Culinary Arts

Prerequisite(s): N/A
Credit: 2.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

This course includes instruction in the operation and management of food service establishments, marketing strategies, quantity food production skills, food presentation and service techniques. The fundamentals and principles of the art of cooking and the science of baking are also covered. The students may host luncheons and/or meals for a variety of organizations. Legal considerations, customer service, career options, food safety and sanitation, and managing multiple family, community, and career roles are contained in the content. Guest Chefs and speakers from local and national culinary organizations are frequent visitors. Upon completion of this course students will be prepared to take the Safe Food Handlers and ServSafe Certification exams. Students will also have the opportunity to compete in cooking competitions and are encouraged to participate in the SKILLSUSA leadership organization.

Practicum in Culinary Arts

Prerequisite(s): Culinary Arts
Credit: 2.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course requires a block of 2 class periods. This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Practicum in Culinary Arts is relevant and rigorous, supports student application of academic standards, and effectively prepares students for college and career success. Students are also encouraged to participate in the FCCLA leadership organization.

HUMAN SERVICES COURSE DESCRIPTIONS

Principles of Human Services

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

Principles of Human Services is designed for students who are interested in careers that deal with counseling, social work, mental health, early childhood development, family issues and cosmetology. This course enables students to investigate careers related to these areas. Students will focus on interpersonal skills, decision-making, developing positive relationships and child-care and development.

Lifetime Nutrition & Wellness

Prerequisite(s): N/A
Credit: ½ One Semester
Grade Level: 9th – 12th
GPA Level: Level I

This fun and practical course allows students to use principles of nutrition and wellness to help them make informed choices that promote nutrition and wellness throughout the life cycle. This course is a must for students who are interested in careers related to culinary arts, dietetics, education and training, human services, and health sciences. This course emphasizes nutrition, menu planning, food costs, food safety, sanitation, and basic culinary skills.

INFORMATION TECHNOLOGY COURSE DESCRIPTIONS

Digital Media

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects. The Digital and Interactive Media class explores the use of 2D and 3D software. In this course students will animate objects, Photoshop projects, create fake photographs and design logos. The students will use industry standard software such as Adobe Photoshop, and Adobe Animate, to create digital imagery and animations. They will also become proficient in using digital cameras, scanners, and a variety of printing techniques.

LAW, SECURITY & PUBLIC SERVICE COURSE DESCRIPTIONS

Principles of Law, Public Safety, Corrections, and Security

Prerequisite(s): N/A
Credit: 1.0 All Year
Grade Level: 9th – 12th
GPA Level: Level I

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.

Forensic Science

Prerequisite(s): Biology & Chemistry
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course can count as a student's fourth Science credit. Forensic science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis. Students will also learn the history, legal aspects, and career options for forensic science. This is an excellent course for students interested in a law enforcement career.

MANUFACTURING COURSE DESCRIPTIONS

Introduction to Welding – (Students simultaneously will be enrolled in Principles of Transportation Systems.)
Prerequisite(s): N/A
Credit: 1.0 – One Semester Course
Grade Level: 9th – 12th
GPA Level: Level I
Introduction to Welding will provide an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Students will be introduced to the three basic welding processes. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. Introduction to Welding will provide students with the knowledge, skills, and technologies required for employment in welding industries. Students will develop knowledge and skills related to welding and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills will prepare students for future success.

Welding I
Prerequisite(s): N/A
Credit: 2.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I
In this welding course instruction follows an industry-standard curriculum, and students' certifications are listed in a national registry upon successful completion. Oxy-fuel welding and cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding will be covered. Hand and power tools, welding on various types of metals, reading blueprint welding symbols, metal characteristics, and equipment setup are other areas that students will master. Safety, leadership, entrepreneurship, and career opportunities are included. Students will also have the opportunity to obtain their AWS certification and the 10-hour OSHA CareerSafe certification in this course. Students are also encouraged to participate in SkillsUSA.

Welding II
Prerequisite(s): Welding I
Credit: 2.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I
This course requires a block of 2 class periods. This advanced level course is designed for students who are interested in welding as a career. Advanced welding builds on knowledge and skills developed in the previous welding course. Training for employment with advance-level skills in welding trades will be emphasized. Instruction follows an industry-standard curriculum, and students' certifications are listed in a national registry upon successful course completion. Students will also have the opportunity to obtain their AWS certification and the NCCER Welding I certification in this course. Students are encouraged to participate in SkillsUSA. This course is eligible for statewide-articulated credit.

Practicum in Manufacturing

Prerequisite(s): N/A
Credit: 2.0 All Year
Grade Level: 12th
GPA Level: Level I

This is an advanced level course in the welding field designed to prepare students for job-specific training or college. This course is designed to give students supervised practical application of previously studied knowledge and skills. This course will cover arc welding, MIG and TIG welding, plasma, oxy-fuel system, and drafting. Students will also be the key designers and constructors of show projects to be shown at state competitions. An American Welding Society Certification is available for arc welding with 6010 and 7018 electrodes. Upon passing this certification, students will receive an AWS Certificate.
Students are encouraged to participate in SkillsUSA.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (STEM) COURSE DESCRIPTIONS

Principles of Applied Engineering

Prerequisite(s): Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and will be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

Engineering Design & Presentation I

Prerequisite(s): Algebra I
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Students will use multiple software applications and tools necessary to produce and present working drawings, solid model renderings and prototypes relating to the engineering design fields.

Engineering Design & Presentation II

Prerequisite(s): Algebra I & Geometry
Credit: 1.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I

Students will use multiple software applications and tools necessary to produce and present working drawings, solid model renderings and prototypes relating to the engineering design fields. Emphasis will be placed on using skills from ideation through prototyping.

Engineering Design & Problem Solving

Prerequisite(s): Algebra I & Geometry
Credit: 1.0 All Year
Grade Level: 11th – 12th
GPA Level: Level I

This course emphasizes solving problems, moving from well defined toward more open ended, with real-world applications. Student use critical-thinking skills to justify a solution from multiple design options. The course is intended to stimulate a student's ingenuity, intellectual talents and practical skills in devising solutions to engineering design problems.

Robotics I

Prerequisite(s): NA
Credit: 1.0 All Year
Grade Level: 9th – 10th
GPA Level: Level I

Student will utilize academic skills to program, design, build and operate multiple robotic platforms. These skills will allow students to complete rigorous tasks and problem-solve issues that arise during classroom and competition settings. Programming through a virtual robotic software provides a simulated environment and immediate assessment of coding skills. This project-based learning environment includes cross-curricular activities that will challenge all levels of intellectual capabilities. Participation in district-wide robotics activities is required.

Robotics II

Prerequisite(s): NA
Credit: 1.0 All Year
Grade Level: 10th – 11th
GPA Level: Level I

Student will utilize academic skills to program, design, build and operate multiple robotic platforms. These skills will allow students to complete rigorous tasks and problem-solve issues that arise during classroom and competition settings. Students will design and manage competitions for multiple PT campuses. Programming through robotic software provides an environment of hands-on learning and immediate assessment of coding skills. This project-based learning environment includes cross-curricular activities that will challenge all levels of intellectual capabilities. Participation in district-wide robotics activities is required.

TRANSPORTATION, DISTRIBUTION & LOGISTICS COURSE DESCRIPTIONS

Principles of Transportation Systems – (Students will be simultaneously enrolled in Intro to Welding.)
Prerequisite(s): N/A
Credit: 1.0 – Semester Course
Grade Level: 9th – 12th
GPA Level: Level I
In this course students will gain knowledge in the area of small engines. Motors will be completely taken apart and put back together successfully. Students will often work in groups of two. Safety, tools, and a solid work environment will be stressed. This is an introductory course to automotive technology where brakes, tune-ups, oil changes and more will be taught. The OSHA CareerSafe 10-Hour certification course will be offered in this course.

Automotive Basics
Prerequisite(s): Principles of Transportation Systems
Credit: 2.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I
Automotive Basics

Automotive Technology I
Prerequisite(s): Small Engine Technology I
Credit: 2.0 All Year
Grade Level: 10th – 12th
GPA Level: Level I
Automotive services include knowledge of the function of the major automotive systems and principals of diagnosing and servicing these systems. In Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. Student will be introduced to basic automotive repair practices that will include: fuel systems, engines, emission control, power trains, chassis, electrical systems, brakes, and heating and air conditioning. Entrepreneurship, safety, leadership and career opportunities will also be covered. Students are encouraged to participate in SkillsUSA.

Automotive Technology II
Prerequisite(s): Automotive Technology
Credit: 2.0 All Year
Grade Level: 12th
GPA Level: Level I
In Advanced Automotive Technology students will continue to be exposed to a variety of automotive services but at a more in-depth level than with Automotive Technology. Students will continue learning skills in the repair, maintenance, and diagnosis of vehicle systems. The theory of operation of automotive vehicle systems and associated repair practices will also be covered. Students are encouraged to participate in SkillsUSA.

DUAL CREDIT OPPORTUNITIES

DUAL CREDIT @ PTHS

DUAL CREDIT ENROLLMENT PROCESS

Kilgore College

- **Complete an online Kilgore College Application – http://www.applytexas.org**
- **Discuss your TSI status with your counselor and make plans to take the TSI Test if needed**
    - **You must be TSI clear in Reading/Writing and/or Math to enroll in an academic dual credit course.**
    - **This requirement is different for workforce dual credit courses.**
- **Complete the Kilgore College Registration Form – including parent signatures – and return it to the counseling center prior to the stated deadline**
- **Once you have submitted an application, completed the registration form and confirmed that you are TSI clear – the counseling center will submit your paperwork to Kilgore College**
- **Check your Kilgore College account for the course and billing statement to appear – make you payment by the stated deadline.**

LeTourneau University

- **Students must have a 3.0 unweighted GPA for LETU admissions**
- **Complete an online LeTourneau Application – letu.dualenroll.com**
- **Check your email periodically for your acceptance and enrollment status**
- **Once you are accepted, you will log in and select the course for which you are registering.**
- **The counseling staff will approve your selected course and you will receive a billing statement in your email.**

PTHS offers a variety of dual credit courses. Dual Credit courses are available in the core curriculum areas, in addition, students can choose to take Dual Credit courses aimed at preparing them for more specialized programs in college.

Dual Credit courses are taken either on the PTHS campus, on the college/university campus, or online. PTHS currently has Dual Credit agreements with the following institutions:

- Kilgore College
- Kilgore College-Longview
- LeTourneau University

Students participating in the dual credit program will be responsible for all required expenses (tuition fees, and books). A limited number of Dual Credit Scholarships will be available for which students may apply. The application can be picked up and returned to the PTHS Counseling Center.

Course offerings may vary per semester but all courses will count in the core college curriculum, or as electives toward an associate's, bachelor's degree or workforce certification(s).

METHOD OF COURSE DELIVERY

All dual credit courses may be offered in one or more of the following methods at the discretion of PTISD and the college:

- *Face-to-face with college professor on the PTHS campus
- *Face-to-face with college professor on the college campus
- *Face-to-face with a PTHS teacher working for the college
- *Face-to-face with a PTHS teacher working alongside the college professor or in a hybrid model
- *Online

PTISD may require students to furnish their own transportation to and from some college classes.

Parents and students will be informed about all transportation requirements as soon as possible before the class begins.

ACADEMIC CORE-CURRICULUM DUAL CREDIT COURSE OPTIONS

COURSES TAUGHT ON THE PTHS CAMPUS

HIST 1301	**US HISTORY**	**HIST 1302**	**US HISTORY**
ENG 1301	**ENGLISH IV**	**ENGL 1302**	**ENGLISH IV**
GOVT 2305	**US GOVERNMENT**	**MATH 1342**	**STATISTICS**
MATH 1314	**COLLEGE ALGEBRA**		

Each of the above courses will transfer as core coursework to any Texas public college or university. By taking all of the listed courses students will fulfill their Political Science, English, History and Math (depending on degree) degree requirements.

If you plan to attend a private or out-of-state college/university, students will need to research the transferability of courses with each institution.

COURSES OFFERED ONLINE

Students can enroll in these courses and have an opportunity to work by taking advantage of our Learning Lab for one period in their schedule. These courses may be offered from Kilgore College, LeTourneau University, and/or UT Tyler depending on availability.

Admission Testing Requirements (Kilgore College Only)

1. Students must meet one of the following assessment criteria:
    a. ACT – composite score 23 with 19 on English and/or Math
    b. SAT – 1070 combined (CR + Math) with 500 on Critical Reading and/or Math
    c. TSI 2–
        i. ELAR
        ii. Math
    d. STAAR
        i. English II – 4000
        ii. Algebra I – 4000 with a passing grade in Algebra II

DUAL CREDIT COURSE DESCRIPTIONS

(Below are a few examples of courses offered on campus and/or online for PTHS students. Course descriptions and numbers may vary by institution.)

ENG 1301 Composition I

(Transcripted as ENGLISH IV A - 0.5 credit)

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, 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. Prerequisite: TSI-complete in writing and reading.

ENG 1302 Composition II

(Transcripted as ENGLISH IV B - 0.5 credit)

Continuation of English 1301. Emphasizes critical thinking and writing skills for analysis of subject matter, form, and style of essays, short stories, drama, and poetry. Teaches basic principles of literary criticism and requires comprehensive essays evaluating each of these types of literature and a documented term paper evaluating a major literary work. Prerequisite: "C" or better in ENGL 1301 and either a passing score on TSI reading

HIST 1301 US History I

(Transcripted as US HISTORY A - 0.5 credit)

A course tracing the development of American characteristics and nationality from the early European exploration through Reconstruction. TSI complete in Reading and English

HIST 1302 US History II

(Transcripted as US HISTORY B - 0.5 credit)

A study of the United States from the end of Reconstruction to the present. Prerequisite: TSI complete in Reading and English.

GOV 2305 Federal Government

(Transcripted as US GOVERNMENT - 0.5 credit)

A study of the American Constitutional Governmental System and the rights, privileges and obligations of citizenship. Prerequisite: TSI complete in Reading and English

GOV 2306 Texas Government (online only)

(Transcripted as SPECIAL TOPICS IN SOCIAL STUDIES I - 0.5 credit)

A study of the nature, organization and general principles of state and local governments within the United States and Texas. Prerequisite: TSI complete in Reading and English

MATH 1314 College Algebra

(Transcripted as INDEPENDENT STUDY IN MATH I – 1.0 credit)

This course is an in-depth study and application of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, and probability may be included. An instructor-approved graphing calculator will be required. Prerequisite: TSI Complete

MATH 1342 Elementary Statistical Methods

(Transcripted as INDEPENDENT STUDY IN MATH II – 1.0 credit)

This course is a study of collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing. An instructor- approved graphing calculator is required. Prerequisites: TSI complete. If not TSI complete in math, students must have a C or better in MATH 0306 or MATH 0307 (fall 2014 or later). Students that have taken MATH 0306 prior to fall 2014, can retest on TSI or retake MATH 0306 or MATH 0307. If not TSI complete in math, student must register for co-requisite section of MATH

ARTS 1301 Art Appreciation

(Transcripted as Art Appreciation – 1.0 credit)

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. Prerequisite: TSI complete in READ and TSI complete in ENGL

DRAM 1310 Introduction To Theater

(Trancripted as Theater Appreciation – 1.0 credit)

A survey of all phases of theatre including its history, dramatic works, stage techniques, production procedures, and relation to fine arts. Recommended for all students of humanities, communications, social sciences, and creative and performing arts. Open to all students. Prerequisite: TSI complete in READ and TSI complete in ENGL

MUSC 1306 Music Appreciation

(Transcripted at PTHS as Music Appreciation – 1.0 credit)

A course training the student in the art of creative listening and acquainting him with composers and their works. Prerequisite: TSI complete in READ and TSI complete in ENGL

PSYC 2301 General Psychology

(Transcripted as Psychology - 0.5 credit)

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. Prerequisite: Must be TSI complete in READ and ENGL

SPCH 1315 Public Speaking

(Transcripted as Communication Application - 0.5 credit)

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Prerequisite: TSI complete in READ and ENGL

COSMETOLOGY PROGRAM

The following courses represent the capstone coursework in the Cosmetology Program of Study. Successful completion of this Program of Study, and accompanying Dual Credit coursework, prepares students for their state license exam and future employment. In addition, students will have also completed the necessary coursework for a Public Service Endorsement. Students registering for this program must plan to have 2 class periods available during their Junior and Senior years. Students will also be responsible for securing transportation to/from the Kilgore College-Longview facility on a daily basis.

Junior/Senior Year Courses

Kilgore College will determine the sequence of courses during the Junior & Senior years.

Program Costs

Students are responsible for the cost of uniforms and supplies. The total cost is approximately $900.00.

Admission & Testing Requirements

1. Complete Kilgore College application
2. Submit Fall & Spring Dual Credit Enrollment Forms to Kilgore College-Longview
3. Submit proof of bacterial meningitis vaccination (within the past 5 years)
4. Take TSI assessment given by Cosmetology Department on designated date
5. Students must adhere to all deadlines to be considered for this program.

COSMETOLOGY COURSE DESCRIPTIONS

CSME 1401 Introduction to Cosmetology

An overview of the skills and knowledge necessary for the field of cosmetology. The student will demonstrate introductory skills, professional ethics, safety and sanitation, and explain the laws and rules of the state.

CSME 1391 Special Topics in Cosmetology

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

CSME 1310 Introduction to Haircutting and Related Theory

Introduction to the theory and practice of hair cutting. Topics include terminology, implements, sectioning and finishing techniques. The student will define terminology; practice basic workplace competencies related to haircutting and finishing techniques. Demonstrate use of implements, sectioning, haircutting, and finishing skills.

CSME 1443 Manicuring and Related Theory
Presentation of the theory and practice of nail services. Topics include terminology, application, and workplace competencies related to nail services. The student will define terminology related to nail services; demonstrate the basic procedures of nail services; practice safety and sanitation according to the laws and rules of the state licensing agency; and exhibit workplace competencies in nail services.

CSME 1447 Principles of Skin Care/Facial and Related Theory
In-depth coverage of the theory and practice of skin care, facials, and cosmetics. The student will define terminology related to the skin, products, and treatments; demonstrate applications related to skin care and cosmetics; practice safety and sanitation according to the laws and rules of the state licensing agency; and exhibit workplace competencies in skincare and cosmetics.

CSME 2310 Advanced Haircutting/Related Theory
Advanced concepts and practice of haircutting. Topics include utilizing scissors, razor, and/or clippers. The student will utilize correct terminology related to advanced haircutting techniques; and demonstrate workplace competencies related to advanced haircutting techniques.

CSME 2401 The Principles of Hair Coloring/ Related Theory
Presentation of the theory, practice, and chemistry of hair color. Topics include terminology, application, and workplace competencies related to hair color. The student will define terminology; demonstrate hair color application; practice safety and sanitation according to the laws and rules of the state licensing agency; and practice workplace competencies related to hair color.

CSME 1354 Artistry of Hair Design I
Introduction to hair design. Topics include the theory and applications of wet styling, thermal hair styling, and finishing techniques. The student will practice basic competencies related to the artistry of hair design; demonstrate use of tools; exhibit basic manipulative skills; and follow safety and sanitation laws and rules according to the state licensing agency.

KILGORE COLLEGE
FIRE FIGHTING ACADEMY @ PTHS

In a partnership with Kilgore College, PTHS will be offering the initial 23 college hours of the Kilgore College Fire Academy on the PTHS campus. This exciting program, with an additional summer boot camp after graduation, offers students the opportunity to prepare for and pass the certification test offered by the Texas Commission on Fire Protection. Upon completion of the coursework, summer boot camp and passage of the TCFD tests, students will be able to seek employment in area fire departments. **Students must be 18 years of age by the date of certification testing. Students must be classified as a JUNIOR OR SENIOR to participate in this program.**

In addition, students will prepare for and take the Emergency Medical Responder certification test. This is the first step towards becoming an Emergency Medical Technician.

Once students are TCFP certified and affiliated with a fire department (paid or volunteer) they qualify for tuition-free enrollment into Texas public colleges if they wish to continue their education in any area of their choosing.

The costs of the Fire Academy at PTHS will be $1,200.00. Payment arrangements with Kilgore College are available. An additional cost of $475.00 will be incurred during the summer boot camp for the rental of fire suppression equipment. The TCFP exam will cost $55.00.

Students who are interested may pick up an application from the PTHS Counseling Center or see their counselor. Students will need to be able to block 2 class periods for the Fire Academy.

INDUSTRIAL MAINTENANCE
KILGORE COLLEGE

The following courses represent the capstone coursework in the Industrial Maintenance Program of Study. Successful completion of this Program of Study, and accompanying Dual Credit coursework, prepares students for future employment in this field. In addition, students will have also completed the necessary coursework for a Business & Industry Endorsement. Students registering for this program must plan to have 2-3 class periods available during their Junior and Senior years. Students will also be responsible for securing transportation to/from the Kilgore College-Longview facility on a daily basis.

Junior/Senior Year Courses

Kilgore College will determine the sequence of courses during the Junior & Senior years.

Testing Requirements

Students must score the current level of mastery on the English II EOC to qualify for this program.

INDUSTRIAL MAINTENANCE COURSE DESCRIPTIONS

DFTG 1325, Basic Blueprint Reading

Reading interpreting and sketching piping drawings. Includes isometric and orthographic views. The student will use blueprint vocabulary and symbols; interpret piping drawings; and demonstrate basic sketching techniques for isometric and orthographic drawings of piping components.

ENTC 1347, Safety and Ergonomics

Occupational Safety and Health Administration (OSHA) safety guidelines including electrical, chemical, and hazardous material safety. Ergonomic considerations to include repetitive motion, plant layout, and machine design. Industrial safety awareness, accident cost and prevention, and workman's compensation issues. The student will explain OSHA general safety guidelines; understand ergonomic design considerations for the industrial environment; and explain industrial safety requirements. This course leads to OSHA 30-hour Certification for General Industry.

ELPT 1311, Basic Electrical Theory

Basic theory and practice of electrical circuits – includes calculations as applied to alternating and direct current.

INTC 1353, Analog Controls

Analog electrical controls in industrial processes – includes electrical distribution, motor controls, relay logic and ladder logic.

DIESEL TECHNOLOGY
KILGORE COLLEGE

The following courses represent the capstone coursework in the Diesel Technology Program of Study. Successful completion of this Program of Study, and accompanying Dual Credit coursework, prepares students for future employment in this field. In addition, students will have also completed the necessary coursework for a Business & Industry Endorsement. Students registering for this program must plan to have 3 class periods available during their Junior and Senior years. Students will also be responsible for securing transportation to/from the Kilgore College-Longview facility on a daily basis.

Junior/Senior Year Courses

Kilgore College will determine the sequence of courses during the Junior & Senior years.

Testing Requirements

Students must score the current level of mastery on the English II EOC to qualify for this program.

DIESEL TECHNOLOGY COURSE DESCRIPTIONS

DEMR 1305, Basic Electrical Systems

Basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, and batteries. The student will perform circuit analysis; identify electrical symbols; use special tools; and test circuits.

DEMR 1316, Basic Hydraulics

Fundamentals of hydraulics including components and related systems. The student will identify various components used in hydraulic systems; evaluate hydraulic components by inspection and testing; and explain hydraulics, theory, circuits, and application.

DEMR 1317, Basic Brake Systems

Basic principles of brake systems of diesel powered equipment. Emphasis on maintenance, repairs, and troubleshooting. The student will demonstrate the basic theory and operation of the brake systems; diagnose brake components for wear and usability; repair brake components by rebuilding or replacing parts; and adjust brake components.

DEMR 1323, HVAC Troubleshooting & Repair

Introduction to heating, ventilation, and air conditioning theory, testing, and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools, and repairs. The student will analyze heating, ventilation, and air conditioning systems; utilize specialized tools; and repair or replace components.

AC & REFRIGERATION TECHNOLOGY
KILGORE COLLEGE

The following courses represent the capstone coursework in the AC & Refrigeration Program of Study. Successful completion of this Program of Study, and accompanying Dual Credit coursework, prepares students for future employment in this field. In addition, students will have also completed the necessary coursework for a Business & Industry Endorsement. Students registering for this program must plan to have 2-3 class periods available during their Junior and Senior years. Students will also be responsible for securing transportation to/from the Kilgore College-Longview facility on a daily basis.

Junior/Senior Year Courses

Kilgore College will determine the sequence of courses during the Junior & Senior years.

Testing Requirements

Students must score the current level of mastery on the English II EOC to qualify for this program.

AC & REFRIGERATION TECHNOLOGY COURSE DESCRIPTIONS

DFTG 1325, Basic Blueprint Reading

Reading interpreting and sketching piping drawings. Includes isometric and orthographic views. The student will use blueprint vocabulary and symbols; interpret piping drawings; and demonstrate basic sketching techniques for isometric and orthographic drawings of piping components.

ENTC 1347, Safety and Ergonomics

Occupational Safety and Health Administration (OSHA) safety guidelines including electrical, chemical, and hazardous material safety. Ergonomic considerations to include repetitive motion, plant layout, and machine design. Industrial safety awareness, accident cost and prevention, and workman's compensation issues. The student will explain OSHA general safety guidelines; understand ergonomic design considerations for the industrial environment; and explain industrial safety requirements. This course leads to OSHA 30-hour Certification for General Industry.

ELPT 1311, Basic Electrical Theory

Basic theory and practice of electrical circuits – includes calculations as applied to alternating and direct current.

INTC 1353, Analog Controls

Analog electrical controls in industrial processes – includes electrical distribution, motor controls, relay logic and ladder logic.

PROCESS TECHNOLOGY
KILGORE COLLEGE

The following courses represent the capstone coursework in the Process Technology Program of Study. Successful completion of this Program of Study, and accompanying Dual Credit coursework, prepares students for future employment in this field. In addition, students will have also completed the necessary coursework for a Business & Industry Endorsement. Students registering for this program must plan to have 2-3 class periods available during their Junior and Senior years. Students will also be responsible for securing transportation to/from the Kilgore College-Longview facility on a daily basis.

Senior Year Courses

Kilgore College will determine the sequence of courses during the Senior years.

Testing Requirements

1. Students must meet one of the following assessment criteria:
    a. ACT – composite score 23 with 19 on English and/or Math
    b. SAT – 1070 combined (CR + Math) with 500 on Critical Reading and/or Math
    c. TSI –
        i. Reading – 351
        ii. Writing – 350 with 5 on essay or 363 with 4 essay
        iii. Math – 350
    d. STAAR
        i. English II – 4000
        ii. Algebra I – 4000 with a passing grade in Algebra II

PROCESS TECHNOLOGY COURSE DESCRIPTIONS

PTAC 1302 Introduction to Process Technology (3 credit hours)

An introduction overview of the various processing industries.

ENTC 1347, Safety and Ergonomics

Occupational Safety and Health Administration (OSHA) safety guidelines including electrical, chemical, and hazardous material safety. Ergonomic considerations to include repetitive motion, plant layout, and machine design. Industrial safety awareness, accident cost and prevention, and workman's compensation issues. The student will explain OSHA general safety guidelines; understand ergonomic design considerations for the industrial environment; and explain industrial safety requirements. This course leads to OSHA 30-hour Certification for General Industry.

PTAC 1310 Process Technology I - Equipment
Introduction to the use of common processing equipment.

PTAC 1332 Process Instrumentation I (3 credit hours)
Study of the instruments and control systems used in the process industry including terminology, process variables, symbology, control loops, and basic troubleshooting.

KILGORE COLLEGE TECHNICAL CORE SEQUENCE

This sequence of four courses is designed to introduce students to a variety of Work Force degree and/or certification possibilities at Kilgore College. Upon completion of this sequence of courses students will have the opportunity to test for several industry-based certifications including OSHA 30 and NCCER Core.

The courses will be taught on an 8-week rotation at the PTHS campus.

ENTC 1347 Safety and Ergonomics

Course Description: Occupational Safety and Health Administration (OSHA) safety guidelines including electrical, chemical, and hazardous material safety. Ergonomic considerations to include repetitive motion, plant layout, and machine design. Industrial safety awareness, accident cost and prevention, and workman's compensation issues.
End-of-Course Outcomes: Explain OSHA general safety guidelines; understand ergonomic design considerations for the industrial environment; and explain industrial safety requirements. Understand and apply safety awareness, cost of accidents, and prevention techniques; and understand the central issues of workman's compensation.

DFTG 1325 Blueprint Reading and Sketching
Course Description: An introduction to reading and interpreting working drawings for fabrication processes and associated trades. Use of sketching techniques to create pictorial and multiple-view drawings.
End-of-Course Outcomes: Interpret working drawings including dimensions, notes, symbols, sections, and auxiliary views; and sketch pictorials and multi-view drawings.

ELPT 1311 Basic Electrical Theory
Course Description: Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.
End-of-Course Outcomes: Explain atomic structure and basic values such as voltage, current, resistance, and power; determine electrical values for combination circuits in direct current (DC) and alternating current (AC) containing resistance, inductance, and capacitance; summarize the principles of magnetism; calculate voltage drop based on conductor length, type of material, and size; and utilize electrical measuring instruments.

INTC 1353 Analog Controls
Course Description: Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.
End-of-Course Outcomes: Explain atomic structure and basic values such as voltage, current, resistance, and power; determine electrical values for combination circuits in direct current (DC) and alternating current (AC) containing resistance, inductance, and capacitance; summarize the principles of magnetism; calculate voltage drop based on conductor length, type of material, and size; and utilize electrical measuring instruments.

PROGRAMS OF STUDY

Arts & Humanities Endorsement

A sequence of 4 courses chosen from one or two of the following categories:

Fine Arts

Visual Arts

Art I
Art II
Art III
Arti IV
Art II Honors
Art III Honors
Art IV Honors
Art IV AP
Art History AP

Performing Arts

Choir I
Choir II
Choir III
Choir IV
Band I
Band II
Band II
Band IV

Dance I
Dance II
Dance III
Dance IV

Theater Arts I
Theater Arts II
Theater Arts III
Theater Arts IV
Tech Theater I
Tech Theater II
Tech Theater III
Tech Theater IV

Arts & Humanities Endorsement

A sequence of 4 courses chosen from one or two of the following categories:

Fine Arts
Foreign Languages
SociaL Sciences

Performing Arts

Cheer I
Cheer II
Cheer III
Cheer IV

Precision Drill Team I
Precision Drill Team II
Precision Drill Team III
Precision Drill Team IV

Foreign Languages

Spanish I
Spanish II
Spanish II Honors
Spanish III
Spanish III Honors
Spanish IV AP

Social Sciences

5 credits in Social Studies to include:

World History, World Geography,
US History, Government, Economics,
Sociology and Psychology

STEM Endorsement

Must complete Algebra II, Chemistry, and Physics - plus one of the following:

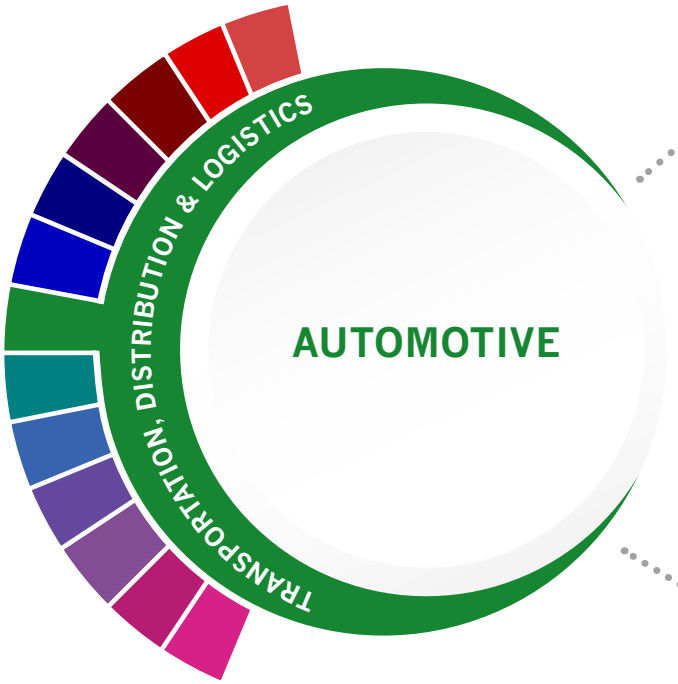
Mathematics

Three credits in mathematics by successfully completing Algebra II and two additional mathematics courses for which Algebra II is the prertequisite.

STEM Non-CTE

Science

Four credits in science by successfully completing Chemistry and Physics and two additional sciences



COURSES

LEVEL 1

Principles of Transportation Systems
Small Engine Technology I
Basic Collision Repair and Refinishing

LEVEL 2

Automotive Basics
Introduction to Transportation Technology
Small Engine Technology II
Collision Repair/Lab
Occupational Safety and Environmental Technology I

LEVEL 3

Automotive Technology I
Energy and Power of Transportation Systems
Paint and Refinishing/Lab

LEVEL 4

Automotive Technology II/Lab
Practicum in Transportation Systems
Practicum in Entrepreneurship (TBD)
Career Preparation I

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Automotive Service Excellence (ASE) Entry Level	Master Collision Repair and Refinishing Technician	Autobody/ Collision and Repair Technology/ Technician		Mechanical Engineering
Automotive Service Excellence (ASE) Professional Level	Automobile Technician: various systems and parts	Medium/Heavy Vehicle and Truck Technology/ Technician		
	Engine Machinist Technician	Mechanical Engineering/ Mechanical Technology/ Technician		
	Collision Repair and Refinish			

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Automotive Body and Related Repairers	$40,144	1,456	25%
Automotive Service Technician and Mechanics	$38,459	208	25%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
SkillsUSA competition
Automotive Service Association

Work Based Learning Activities:
Work at a local automotive repair or body shop.

The Automotive program of study teaches students how to repair and refinish automobiles and service various types of vehicles. Students may learn to collect payment for services or supplies and perform typical vehicle maintenance procedures such as lubrication, oil changes, installation of antifreeze, or replacement of accessories like wiper blades or tires.

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

Successful completion of the Automotive program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Transportation Systems	13039250 (1 credit)	None	9-12
Small Engine Technology I	13040000 (1 credit)	None	9-12
Basic Collision Repair and Refinishing	13039750 (1 credit)	None	9-12
Automotive Basics	13039550 (1 credit)	None	9-12
Introduction to Transportation Technology	13039270 (.5 credit)	None	9-10
Small Engine Technology II	13040100 (2 credits)	PREQ: Small Engine Technology I	10-12
Collision Repair/Lab	13039800 (2 credits) 13039810 (3 credits)	None	10-12
Occupational Safety and Environmental Technology I	N1303680 (1 credit)	None	9-12
Automotive Technology I: Maintenance and Light Repair	13039600 (2 credits)	None	9-12
Energy and Power of Transportation Systems	13039300 (1 credit)	None	10-12
Paint and Refinishing/Lab	13039900 (2 credits) 13039910 (3 credits)	None	10-12
Automotive Technology II/Lab	13039700 (2 credits) 13039710 (3 credits)	PREQ: Automotive Technology I: Maintenance and Light Repair	11-12
Practicum in Transportation Systems	13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits) 13040465 (3 credits)	None	11-12
Practicum in Entrepreneurship	TBD	TBD	TBD
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION, AND LOGISTICS CAREER CLUSTER, PLEASE CONTACT:

Kevin Johnson | Kevin.Johnson@tea.texas.gov

https://tea.texas.gov/cte

COURSES

LEVEL 1

Principles of Business, Marketing, and Finance
Business Information Management I/Lab

LEVEL 2

Business Law
Virtual Business
Business Information Management II/Lab

LEVEL 3

Business Management
Global Business
Human Resources Management

LEVEL 4

Statistics and Business Decision Making
Practicum in Business Management
Practicum in Entrepreneurship (TBD)
Career Preparation I

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Microsoft Office Specialist or Expert - Excel	Certified Records Manager	Business Administration		
Microsoft Office Specialist or Expert - Word	Certified Facility Manager	Business/ Commerce		Business Management
Google Cloud Certified Professional - G-Suite	Certified Commercial Contracts Manager	Public Administration		
Certified Associate in Project Management	Teradata 14 Basics/ Certified Technical Specialist	Business Management	Management Science	

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Administrative Service Managers	$96,138	2,277	21%
Management Analysts	$87,651	4,706	32%
General and Operations Managers	$107,640	18,679	20%
Operations Research Analysts	$78,083	1,128	38%
Supervisors of Administrative Support Workers	$57,616	14,982	20%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Business Professionals of America (BPA), Future Business Leaders of America (FBLA), and DECA

Work Based Learning Activities: Internship with local business or chamber of commerce;

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

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

Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	9-11
Business Information Management I/Lab	13011400 (1 credit) 13011410 (2 credits)	None	9-12
Business Law	13011700 (1 credit)	None	11-12
Virtual Business	13012000 (.5 credit)	None	10-12
Business Information Management II/Lab	13011500 (1 credit) 13011510 (2 credits)	PREQ: Business Information Management I	10-12
Business Management	13012100 (1 credit)	None	10-12
Global Business	13011800 (.5 credit)	None	10-12
Human Resource Management	13011900 (.5 credit)	None	11-12
Statistics and Business Decision Making	13016900 (1 credit)	PREQ: Algebra II	11-12
Practicum in Business Management	13012200 (2 credits) 13012205 (3 credits) 13012210 (2 credits) 13012215 (3 credits)	None	11-12
Practicum in Entrepreneurship	TBD	TBD	TBD
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12
Practicum in Transportation Systems	13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits)		11-12
Practicum in Entrepreneurship	TBD		TBD
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)		11-12

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

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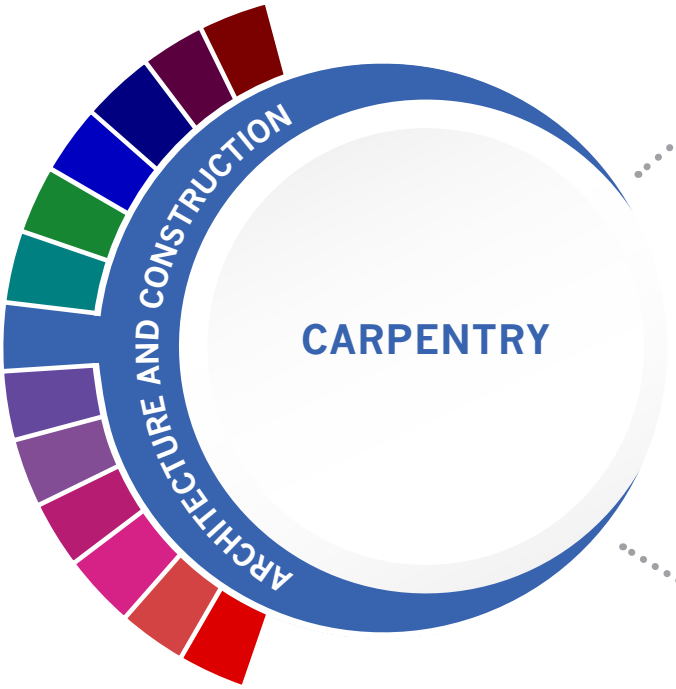

COURSES

LEVEL 1

Principles of Construction
Principles of Architecture

LEVEL 2

Construction Technology I

LEVEL 3

Construction Technology II
Mill & Cabinetmaking Technology

LEVEL 4

Practicum in Construction Technology
Practicum in Entrepreneurship (TBD)
Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
NCCER Carpentry, Level 1 & 2	Certified Lead Carpenter	Carpentry/ Carpenter	Construction Science	Construction Management
NCCER Commercial Carpenter	Certified Installer	Industrial Mechanics and Maintenance Technology		
NCCER Core Curriculum	Certified Door Consultant			
NCCER Construction Technology	Fluid Power Connector and Conductor			

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Carpenters	$35,922	5,031	26%
Cost Estimators	$63,939	2,239	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Shadow a carpenter or millwright.
SkillUSA

Work Based Learning Activities:
Obtain an NCCER certification in Millwright Level 1 or Carpentry Level 1.

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

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.

Successful completion of the Carpentry program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019

TEA Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Construction	13004220 (1 credit)	None	9-12
Principles of Architecture	13004210 (1 credit)	None	9-12
Construction Technology I	13005100 (2 credits)	None	10-12
Construction Technology II	13005200 (2 credits)	PREQ: Construction Technology I	11-12
Mill & Cabinetmaking Technology	13005300 (2 credits)	None	10-12
Practicum in Construction Technology	13005250 (2 credits) 13005255 (3 credits) 13005260 (2 credits) 13005265 (3 credits)	PREQ: Construction Technology II, Building Maintenance Technology II, Electrical Technology II, Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II, Plumbing Technology I, or Mill and Cabinetmaking Technology	12
Practicum in Entrepreneurship	TBD	TBD	TBD
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

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

Les Hudson | Les.Hudson@tea.texas.gov

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COURSES

LEVEL 1

Introduction to Culinary Arts
Principles of Hospitality and Tourism

LEVEL 2

Culinary Arts
Foundations of Restaurant Management (TBD)

LEVEL 3

Advanced Culinary Arts

LEVEL 4

Food Science
Practicum in Culinary Arts
Practicum in Entrepreneurship (TBD)
Career Preparation I

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Fundamentals Cook	Certified Chef	Hotel and Restaurant Management		
Certified Fundamentals Pastry Cook	Foodservice Management Professional	Restaurant Culinary and Catering Management	Food Service Systems Administration/Management	
ServSafe Manager	Comprehensive Food Safety	Hospitality Administration/Management, General		
ManageFirst Professional	Certified Food and Beverage Executive	Culinary Arts/ Chef Training	Culinary Science and Food Service Management	Business Administration Management, General

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Food Service Managers	$55,619	1,561	28%
Chef and Head Cooks	$43,285	1,366	25%
Food Science Technicians	$34,382	236	11%
Food and Beverage Managers	$55,619	1,561	28%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:

Family, Career, Community Leaders of America (FCCLA), SkillsUSA, American Culinary Federation,Texas Restaurant Association

Work Based Learning Activities:

Plan a catering event or work for a catering company; participate in a cooking course; work in a restaurant; cook at home

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

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

Successful completion of the Culinary Arts program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019

TEA Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Introduction to Culinary Arts	13022550 (1 credit)	None	9-12
Principles of Hospitality and Tourism	13022200 (1 credit)	None	9-12
Culinary Arts	13022600 (2 credits)	None	10-12
Foundations of Restaurant Management	TBD	TBD	TBD
Advanced Culinary Arts	13022650 (2 credits)	PREQ: Culinary Arts	10-12
Food Science	13023000 (1 credit)	PREQ: 3 units of science, including Chemistry and Biology	11-12
Practicum in Culinary Arts	13022700 (2 credits) 13022705 (3 credits) 13022710 (2 credits) 13022715 (3 credits)	PREQ: Culinary Arts	11-12
Practicum in Entrepreneurship	TBD	TBD	TBD
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12
Energy and Power of Transportation Systems			
Paint and Refinishing/Lab	13039900 (2 credits) 13039910 (3 credits)		10-12
Automotive Technology II/Lab	13039700 (2 credits) 13039710 (3 credits)		11-12

FOR ADDITIONAL INFORMATION ON THE HOSPITALITY AND TOURISM CAREER CLUSTER, PLEASE CONTACT:

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COURSES

LEVEL 1

Principles of Law, Public Safety, Corrections, and Security

LEVEL 2

Disaster Response

LEVEL 3

Firefighter I
Emergency Medical Technician - Basic
Anatomy and Physiology
National Security
Counseling and Mental Health

LEVEL 4

Firefighter II
Practicum in Law, Public Safety, Corrections, and Security
Project-Based Research

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Emergency Medical Technician - Basic		Emergency Medical Technology/Technician (EMT Paramedic)		Mechanical Engineering
Emergency Telecommunicator	Fire Protection Personnel/ Firefighter	Fire Prevention and Safety Technology/ Technician	Natural Resources Law Enforcement and Protective Services	
Basic Structure Fire Protection Certification	Fire Protection System Contractor	Fire Science/ Fire-fighting		
	Fire Inspector			

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Firefighters	$50,149	2,309	13%
Fire Inspectors and Investigators	$54,787	161	14%
Emergency Medical Technicians	$34,091	1,880	31%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Attend local emergency awareness events; Texas Public Service Association

Work Based Learning Activities:
Volunteer at a hospital or a fire station

The Emergency Services program of study focuses on training students to respond to emergency situations, namely medical emergencies and fire-based emergencies. Students may learn how to prevent emergencies, respond appropriately and in accordance with rules and regulations during crises, and investigate and delineate the source of the emergency.

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

Successful completion of the Emergency Services program of study will fulfill requirements of the Public Service Endorsement.
Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	9-12
Disaster Response	N1303011 (1 credit)	None	9-12
Firefighter I	13029900 (2 credits)	None	10-12
Emergency Medical Technician - Basic	N1303015 (2 credits)	PREQ: Biology	11-12
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit;	10-12
National Security	13018800 (1 credit)	None	10-12
Counseling and Mental Health	13024600 (1 credit)	None	11-12
Firefighter II	13030000 (3 credits)	PREQ: Firefighter I	11-12
Practicum in Law, Public Safety, Corrections, and Security	13030100 (2 credits) 13030105 (3 credits) 13030110 (2 credits) 13030115 (3 credits)	None	11-12
Project-Based Research	12701500 (1 credit)	None	11-12
Paint and Refinishing/Lab	13039900 (2 credits) 13039910 (3 credits)	None	
Automotive Technology II/Lab	13039700 (2 credits) 13039710 (3 credits)	PREQ: Automotive Technology I: Maintenance and Light Repair	11-12
Practicum in Transportation Systems	13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits)	None	11-12
Practicum in Entrepreneurship	TBD	TBD	TBD

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER, PLEASE CONTACT:

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https://tea.texas.gov/cte

COURSES

LEVEL 1
Lifetime Nutrition and Wellness
Principles of Exercise Science and Wellness (TBD)

LEVEL 2
Kinesiology I (TBD)

LEVEL 3
Anatomy and Physiology
Kinesiology II (TBD)

LEVEL 4
Practicum in Entrepreneurship (TBD)
Project Based Research
Career Preparation I

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Personal Trainer	Physical Therapist Assistant	Kinesiology and Exercise Science		Exercise Physiology
Automotive Service Excellence (ASE) Professional	Physical Therapy Aides	Therapeutic Recreation/ Recreational Therapy		
	Dietetic Technician	Athletic Training/ Trainer		
	Collision Repair and Refinish		Dietitians and Nutritionists	Physical Therapist

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Athletic Trainers	$53,450	215	22%
Exercise Physiologists	$41,662	33	33%
Coaches and Scouts	$40,010	2,133	23%
Medical and Health Service Managers	$57,762	428	24%
Recreational Therapists	$45,906	74	24%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Health Occupation Students of America (HOSA)

Work Based Learning Activities:
Volunteer at a hospital or rehabilitation center; manage a school sports team

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

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

Successful completion of the Exercise Science and Wellness program of study will fulfill requirements of the Public Service Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Lifetime Nutrition and Wellness	13024500 (.5 credit)	None	9-12
Principles of Exercise and Wellness	TBD	TBD	TBD
Kinesiology I	TBD	TBD	TBD
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit; RPREQ: a course from the Health Science cluster	10-12
Kinesiology II	TBD	TBD	TBD
Practicum in Entrepreneurship	TBD	TBD	TBD
Project-Based Research	12701500 (1 credit)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12
Automotive Technology I: Maintenance and Light Repair	13039600 (2 credits)	None	9-12
Energy and Power of Transportation Systems	13039300 (1 credit)	None	10-12
Paint and Refinishing/Lab	13039900 (2 credits) 13039910 (3 credits)	None	10-12

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER, PLEASE CONTACT:

Kevin Johnson | Kevin.Johnson@tea.texas.gov

https://tea.texas.gov/cte

COURSES

LEVEL 1

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

LEVEL 2

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

LEVEL 3

Counseling and Mental Health
Family and Community Services

LEVEL 4

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

POSTSECONDARY OPTIONS

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

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Child, Family, and School Social Workers	$41,350	2,221	17%
Social and Community Services Managers	$65,146	608	33%
Marriage and Family Therapists	$42,266	217	35%
Social and Human Service Assistants	$32,448	2,822	25%
Mental Health and Substance Abuse and Behavioral Disorder Counselors	$42,120	576	39%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
American Association of Family and Consumer Sciences, Family, Career and Community Leaders of America

Work Based Learning Activities:
Volunteer at a community center; intern for a community non-profit organization

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

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

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

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITE (PREQ) COREQUISITE (CREQ)	GRADE
Principles of Human Services	13024200 (1 credit)	None	9-12
Professional Communications	13009900 (.5 credit)	None	9-12
Interpersonal Studies	13024400 (.5 credit)	None	9-12
Dollars and Sense	13024300 (.5 credit)	None	11-12
Principles of Community Services	TBD	TBD	TBD
Lifetime Nutrition and Wellness	13024500 (.5 credit)	None	9-12
Human Growth and Development	13014300 (1 credit)	None	10-12
Child Development	13024700 (1 credit)	None	10-12
Social and Community services (TBD)	TBD	TBD	TBD
Counseling and Mental Health	13024600 (1 credit)	None	11-12
Family and Community Services	13024900 (1 credit)	None	10-12
Practicum in Human Services	13025000 (2 credits) 13025005 (3 credits) 13025010 (2 credits) 13025015 (3 credits)	None	11-12
Practicum in Entrepreneurship (TBD)	TBD	TBD	TBD
Project-Based Research	12701500 (1 credit)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE HUMAN SERVICES CAREER CLUSTER, PLEASE CONTACT:

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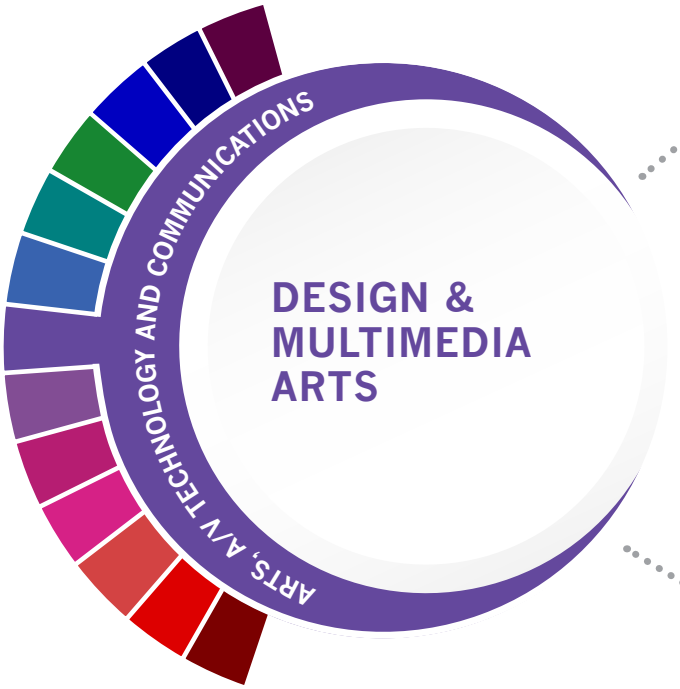

COURSES

LEVEL 1

Principles of Arts, A/V Technology, and Communications
Video Game Design
Digital Media

LEVEL 2

Graphic Design and Illustration I/Lab
Animation I/Lab
Video Game Programming
Commercial Photography I/Lab
Fashion Design I/Lab
Digital Design and Media Productions
Game Programming and Design

LEVEL 3

Graphic Design and Illustration II/Lab
Animation II/Lab
Advanced Video Game Programming
Commercial Photography II/Lab
Fashion Design II/Lab
Digital Art and Animation
3-D Modeling and Animation

LEVEL 4

Practicum in Graphic Design and Illustration
Practicum in Animation
Practicum in Commercial Photography
Practicum in Entrepreneurship (TBD)
Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Adobe Certified Associate Certifications	Certified Digital Designer	Animation, Interactive Technology, Video Graphics and Special Effects		
Adobe Certified Expert Certifications	WOW Certified Web Designer Apprentice	Graphic Design		
Apple Logic Pro X	Adobe Suite Certifications	Game and Interactive Media Design		Intermedia/ Multimedia
	Collision Repair and Refinish			

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Graphic Designers	$44,824	1,433	15%
Multimedia Artists and Animators	$67,392	186	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Join a website development or coding club.
SkillsUSA, TSA

Work Based Learning Activities:
Intern with a multimedia or animation studio.
Obtain a certificate in graphic design.

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

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.

Successful completion of the Graphic Design & Multimedia Arts program of study will fulfill requirements of a Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

TEA Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Arts, A/V Technology, and Communications	13008200 (1 credit)	None	9
Video Game Design	13009970 (1 credit)	None	9-12
Digital Media	13027800 (1 credit)	None	9-12
Graphic Design and Illustration I /Lab	13008800 (1 credit) 13008810 (2 credits)	None	10-12
Animation I/Lab	13008300 (1 credit) 13008310 (2 credits)	None	10-12
Video Game Programming	N1300994 (1 credit)	None	10-12
Commercial Photography I/Lab	13009100 (1 credit) 13009110 (2 credits)	None	9-12
Fashion Design I/Lab	13009300 (1 credit) 13009310 (2 credits)	None	10-12
Digital Design and Media Production	03580400 (1 credit)	None	9-12
Game Programing and Design	03580380 (1 credit)	PREQ: Algebra I	9-12
Graphic Design and Illustration II /Lab	13008900 (1 credit) 13008910 (2 credits)	PREQ: Graphic Design and Illustration I	10-12
Animation II/Lab	13008400 (1 credit) 13008410 (2 credits)	PREQ: Animation I	11-12
Advanced Video Game Programming	N1300995 (1 credit)	None	10-12
Fashion Design II/Lab	13009400 (1 credit) 13009410 (2 credits)	PREQ: Fashion Design I	11-12
Digital Art and Animation	03580500 (1 credit)	None	9-12
3-D Modeling and Animation	03580510 (1 credit)	None	9-12
Commercial Photography II/Lab	13009200 (1 credit) 13009210 (2 credit)	None	10-12
Practicum in Graphic Design and Illustration	13009000 (2 credits) 13009005 (3 credits) 13009010 (2 credits) 13009015 (3 credits)	PREQ: Graphic Design and Illustration II and Graphic Design and Illustration II Lab	10-12
Practicum in Animation	13008450 (2 credits) 13008455 (3 credits) 13008460 (2 credits) 13008465 (3 credits)	PREQ: Animation II and Animation II Lab	11-12
Practicum in Commercial Photography	13009250 (2 credits) 13009255 (3 credits) 13009260 (2 credits) 13009265 (3 credits)	PREQ: Commercial Photography I and Commercial Photography I Lab.	10-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12
Practicum in Entrepreneurship	TBD	TBD	TBD

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

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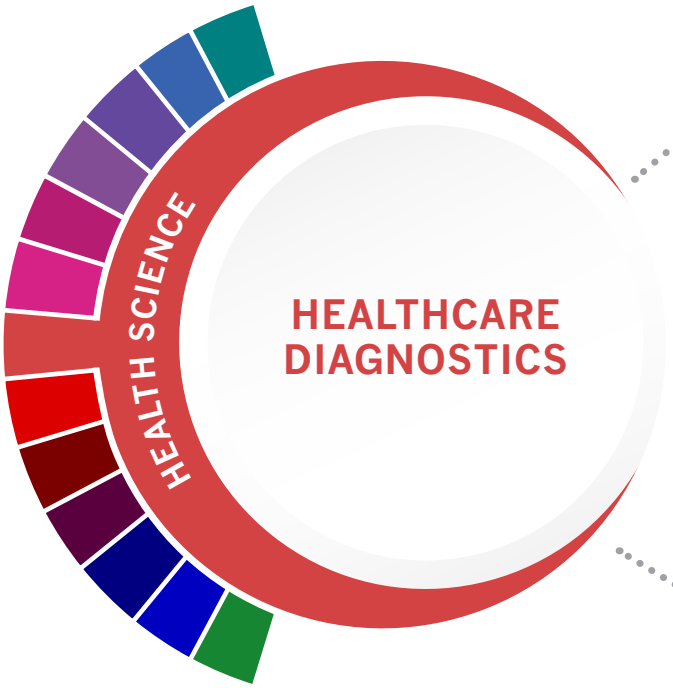

COURSES

LEVEL 1
Principles of Health Science
Principles of Diagnostic Healthcare (TBD)
Introduction to Imaging Technology (TBD)

LEVEL 2
Medical Terminology
Imaging Technology I (TBD)

LEVEL 3
Health Science Theory
Medical Microbiology
Imaging Technology II (TBD)

LEVEL 4
Anatomy and Physiology
Pathophysiology
Practicum in Health Science

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Limited Licensed Radiology Technologist	Medical Sonographer	Nuclear Medical Technology/ Technologist		Radiologist
EKG/ ECG Technician	Radiologic Technologist	Magnetic Resonance Imaging (MRI) Technology/ Technician	Medical Radiologic Technology/ Science Radiation Therapist	Radiologic Technology/ Science - Radiographer
Medical Laboratory Technician	Engine Machinist Technician			
Phlebotomy Technician	Collision Repair and Refinish			

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Diagnostic Medical Sonographers	$69,909	495	35%
Phlebotomists	$30,597	1,442	36%
Nuclear Medicine Technologists	$75,962	91	13%
Radiologic Technologists	$55,494	1,196	19%
Magnetic Resonance Imaging Technologists	$68,661	217	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Health Occupation Students of America (HOSA)

Work Based Learning Activities:
Clinical rotations at a community wellness center, hospital, assisted living, nursing home

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

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

Successful completion of the Healthcare Diagnostics program of study will fulfill requirements of the Public Service Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Health Science	13020200 (1 credit)	None	9-10
Principles of Diagnostic Healthcare	TBD	TBD	TBD
Introduction to Imaging Technology	TBD	TBD	TBD
Medical Terminology	13020300 (1 credit)	None	9-12
Imaging and Technology I	TBD	TBD	TBD
Health Science Theory	13020400 (1 credit) 13020410 (2 credits)	PREQ: Biology	10-12
Medical Microbiology	13020700 (1 credit)	PREQ: Biology and Chemistry	10-12
Imaging Technology II	TBD	TBD	TBD
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit	10-12
Pathophysiology	13020800	PREQ: Biology and a second science credit	10-12
Practicum in Health Science	13020500 (2 credits) 13020505 (3 credits) 13020510 (2 credits) 13020515 (3 credits)	PREQ: Health Science Theory and Biology	11-12

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER, PLEASE CONTACT:

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COURSES

LEVEL 1

Principles of Information Technology
Geographic Information Systems

LEVEL 2

Computer Maintenance/Lab
Raster Based GIS

LEVEL 3

Computer Technician Practicum
Spatial Technology and Remote Sensing
IT Troubleshooting (TBD)

LEVEL 4

Computer Technician Practicum (2nd time)
Practicum of Information Technology
Practicum in Entrepreneurship (TBD)
Project-Based Research
Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Microsoft Technology Associate Windows Operating System Fundamentals	IBM Certified Specialist - InfoSphere Optim for Distributed Systems Fundamentals	Computer and Information Sciences, General		
ERSI ArcGIS Desktop Entry	IBM Certified Database Associate - DB2 11 Fundamentals for z/OS	Computer and Information Systems Security/Information Assurance		Computer Systems Analysis/ Analyst
CompTIA A+	HP ASE - ProLiant Server Solutions Integrator V2	Information Technology	Computer Engineering, General	
CompTIA IT Fundamentals +	Oracle Linux 6 Advanced System Administration	Computer Systems Networking and Telecommunications		Information Technology

Additional industry based certification information is available from the TEA CTE website

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Database Administrator	$83,075	1,063	19%
Information Technology - Computer Occupations, All Other	$85,197	1,616	20%
Computer Hardware Engineer	$111,738	343	24%
Computer System Analyst and Support	$87,568	5,937	29%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Join TSA
Job shadow a database administrator or computer hardware engineer

Worked Based Learning Activities:
Obtain a Certification

The Information Technology Support and Services program of study explores the occupations and educational opportunities associated with administering, testing, and implementing computer databases and applying knowledge of database management systems. This program of study may also include analyzing user requirements and problems to automate or improve existing systems and review computer system capabilities. This program of study may also include exploration into the research, design, or testing of computer or computer-related equipment for commercial, industrial, military, or scientific use.

The Information Technology (IT) Career Cluster® 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.

Successful completion of the Information Technology Support and Services program of study will fulfill requirements of a Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

TEA Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITE (PREQ) COREQUISITE (CREQ)	GRADE
Principles of Information Technology	13027200 (1 credit)	None	9-10
Geographic Information Systems	N1302805 (1 credit)	None	10-12
Computer Maintenance/Lab	13027300 (1 credit) 13027310 (2 credits)	None	10-12
Raster Based GIS	N1302806 (1 credit)	None	10-12
Computer Technician Practicum	13027500 (2 credits) 13027505 (3 credits)	None	10-12
Spatial Technology and Remote Sensing	N1302807 (1 credit)	None	10-12
IT Troubleshooting	TBD	TBD	TBD
Computer Technician Practicum (2nd time)	13027510 (2 credits) 13027515 (3 credits)	PREQ: Computer Technician Practicum	12
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits) 13028010 (2 credits) 13028015 (3 credits)	PREQ: A minimum of two high school information technology (IT) courses	12
Practicum in Entrepreneurship	TBD	TBD	TBD
Project-Based Research	12701500 (1 credit)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE THE INFORMATION TECHNOLOGY CAREER CLUSTER, PLEASE CONTACT:

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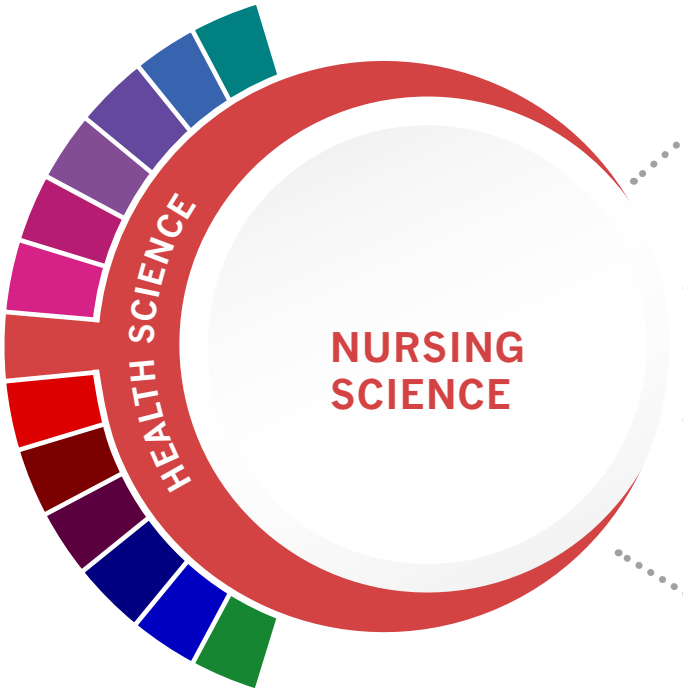

COURSES

LEVEL 1
Principles of Health Science
Principles of Nursing (TBD)

LEVEL 2
Medical Terminology
Science of Nursing (TBD)

LEVEL 3
Medical Microbiology
Anatomy and Physiology
Clinical Ethics (TBD)
Leadership and Management in Nursing (TBD)

LEVEL 4
Pathophysiology
Pharmacology
Practicum in Nursing (TBD)

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Medical Assistant	Licensed Vocational Nurse	Registered Nursing/ Registered Nurse	Informatics Nurse Specialists	Nurse Practitioner
Certified Nurse Aide/Assistant	Automobile Technician: various systems and parts	Medium/Heavy Vehicle and Truck Technology/ Technician		Nursing Administration
Certified Patient Care Technician	Engine Machinist Technician			Nurse Anesthesist
	Collision Repair and Refinish			

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Licensed Vocational Nurses	$45,178	7,186	21%
Registered Nurses	$68,682	17,493	26%
Nurse Practitioners	$107,827	977	50%
Informatics Nurse Specialists	$88,270	4,610	15%
Nurse Anethesists	$154,856	357	23%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Health Occupation Students of America (HOSA)

Work Based Learning Activities:
Volunteer at a community wellness center, hospital, assisted living center, or nursing home.

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

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

Successful completion of the Nursing program of study will fulfill requirements of the Public Service Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Health Science	13020200 (1 credit)	None	9-10
Principles of Nursing	TBD	TBD	TBD
Medical Terminology	13020300 (1 credit)	None	9-12
Science of Nursing	TBD	TBD	TBD
Medical Microbiology	13020700 (1 credit)	PREQ: Biology and Chemistry	10-12
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit	10-12
Clinical Ethics	TBD	TBD	TBD
Leadership and Management in Nursing	TBD	TBD	TBD
Pathophysiology	13020800 (1 credit)	PREQ: Biology and Chemistry	11-12
Pharmacology	13020950 (1 credit)	PREQ: Biology and Chemistry	11-12
Practicum in Nursing	TBD	TBD	TBD

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER, PLEASE CONTACT:

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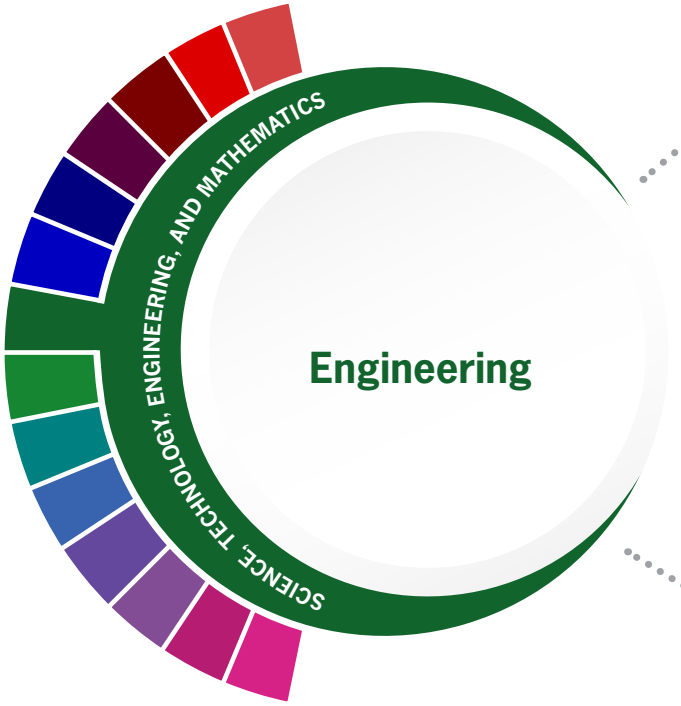
https://tea.texas.gov/cte



COURSES

LEVEL 1

Principles of Applied Engineering
Computer Aided Drafting for Manufacturing (TBD)
Introduction to Engineering Design (PLTW)

LEVEL 2

LEVEL 3

Engineering Design and Presentation I

LEVEL 4

Engineering Design and Problem Solving
Engineering Design and Presentation II
Practicum in STEM
Scientific Research and Design

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Autodesk Certified Professional or User (ACU) - Inventor	Engineer, Professional	Electrical and Electronics Engineering	Electrical and Electronics Engineering	Electrical and Electronics Engineering
Certified SolidWorks Associate (CSWA)	Fluid Power Systems Designer	Drafting and Design Technology/ Technician, General	CAD/CADD Drafting and/or Design Technology/ Technician	Mechanical Engineering
Certified Engineering Technician - Audio Systems	Certified Biomedical Auditor	Engineering Technology	Bioengineering and Biomedical Engineering	Bioengineering and Biomedical Engineering
	Certified Cost Estimator/ Analyst		Construction Engineering Technology/ Technician	

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Aerospage Engineers	$110,843	481	9%
Industrial Engineers	$97,074	1,263	10%
Mechanical Engineers	$91,707	1,535	11%
Chemical Engineers	$112,819	474	9%
Electrical Engineers	$98,405	1,137	10%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Participate in competitions like Skills USA

Career Preparation Activities:
Engineering internship
Job shadow a machinist

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

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.

Successful completion of the Engineering program of study will fulfill requirements of the Business and Industry or STEM Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Applied Engineering	13036200 (1 credit)	None	9-10
Engineering Design & Presentation I	13036500 (1 credit)	PREQ: Algebra I	10-12
Engineering Design & Problem Solving	13037300 (1 credit)	PREQ: Algebra I and Geometry	11-12
Engineering Design and Presentation II	13036600 (2 credits)	PREQ: Algebra I and Geometry	11-12
Practicum in Science, Technology, Engineering, and Mathematics	13037400 (2 credits) 13037405 (2 credits) 13037410 (3 credits) 13037415 (3 credits)	PREQ: Algebra I and Geometry	12
Scientific Research & Design	13037200 (1 credit)	PREQ: Biology, Chemistry, Integrated Physics, and Chemistry (IPC), or Physics	11-12

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS CAREER CLUSTER, PLEASE CONTACT:

https://tea.texas.gov/cte

COURSES

LEVEL 1
Principles of Education and Training
Principles of Human Services

LEVEL 2
Human Growth and Development
Child Development
Communication and Technology in Education
(TBD)

LEVEL 3
Instructional Practices
Special Populations (TBD)

LEVEL 4
Practicum in Education and Training
Project Based Research
Career Preparation I

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Educational Aide I	Texas Educator Certification Program	Teacher Education	Bilingual and Multilingual Education	Instruction and Learning
Automotive Service Excellence (ASE) Professional	Educational Instructional Technology	Education, General (or specific subject area)		Educational Leadership and Administration, General
	Counselor, Professional	Special Education		
	Athletic Trainer	Health and Physical Education/Fitness		Social and Philosophical Foundations of Education

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Adult Basic and Secondary Education and Literacy Teachers and Instructors	$48,069	862	17%
Middle School Teachers, Except Special and Career/ Technical Education	$54,510	6,407	15%
Career and Technical Education Teachers, Secondary School	$56,360	719	9%
Special Education Teachers, Secondary School	$56,720	980	18%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Texas Association of Future Educators, or Family, Career and Community Leaders of America

Work Based Learning Activities:
Teach a community education class; intern as a teaching assistant or tutor; serve as a camp counselor.

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

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.

Successful completion of the Teaching and Training program of study will fulfill requirements of the Public Service Endorsement.
Approved Statewide Program of Study - September 2019

TEA Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Education and Training	13014200 (1 credit)	None	9-10
Principles of Human Services	13024200 (1 credit)	None	9-12
Human Growth and Development	13014300 (1 credit)	None	10-12
Child Development	13024700 (1 credit)	None	10-12
Communication and Technology in Education	TBD	TBD	TBD
Instructional Practices	13014400 (2 credits)	None	11-12
Special Populations	TBD	TBD	TBD
Practicum in Education and Training	13014500 (2 credits) 13014505 (3 credits) 13014510 (2 credits) 13014515 (3 credits)	PREQ: Instructional Practices	12
Project Based Research	12701500 (1 credit)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE EDUCATION AND TRAINING CAREER CLUSTER, PLEASE CONTACT:

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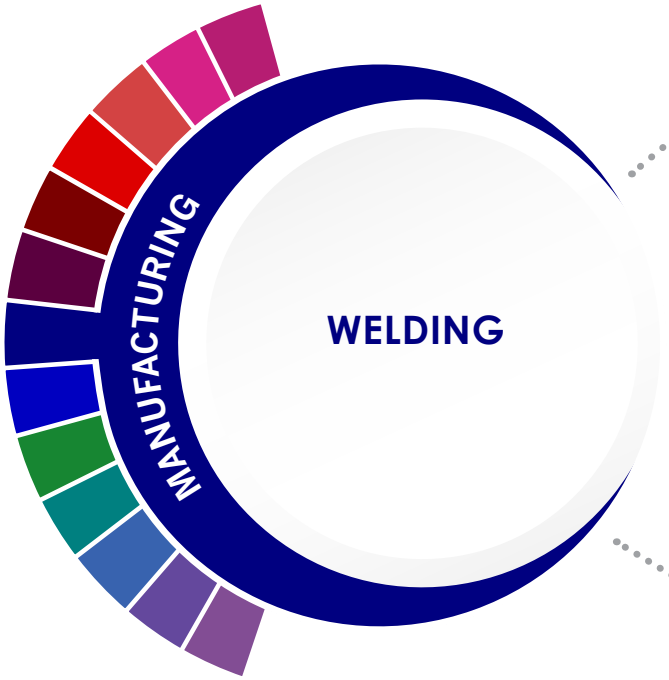
https://tea.texas.gov/cte



COURSES

LEVEL 1
Introduction to Welding

LEVEL 2
Welding I

LEVEL 3
Welding II/Lab

LEVEL 4
Practicum in Manufacturing
Practicum in Entrepreneurship (TBD)
Career Preparation I

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
AWS Certified Welder, D1.1, D9.1	Certified Welder or Welder Inspector	Welding Technology/ Welder	Welding Engineering Technology/ Technician	
ASW SENSE Level 1	Machining Level 1 - CNC Milling: Programming Setup & Operations	Machine Shop Technology/ Assistant	Biomedical Technology/ Technician	Occupational Health and Industrial Hygiene
API 1104 Welding Certificate	Certified Welding Engineering	Operations Management and Supervision		
NCCER Welding, Level 1	Certified Environmental, Safety, and Health Trainer	Occupational Safety and Health Technology/ Technician	Environmental Health	

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Welders, Cutters, Solderers, and Brazers	$41,350	6,171	9%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Participate and compete in SkillsUSA
Job shadow a machinist

Work Based Learning Activities:
Apprenticeship at a local business or industry
American Welding Society

The Welding program of study focuses on the development and use of automatic and computer-controlled machines, tools, and robots that perform work on metal or plastic. Students will learn how to modify parts to make or repair machine tools or maintain individual machines, and how to use hand-welding or flame-cutting equipment.

The Manufacturing Career Cluster® focuses focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Successful completion of the Manufacturing Technology program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Introduction to Welding	13032250 (1 credit)	None	9-12
Welding I	13032300 (2 credit)	None	10-12
Welding II/Lab	13032400 (2 credits) 13032410 (3 credits)	PREQ: Welding I	11-12
Practicum in Manufacturing	13033000 (2 credits) 13033005 (3 credits) 13033010 (2 credits) 13033015 (3 credits)	None	12
Practicum in Entrepreneurship	TBD	TBD	TBD
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12
Collision Repair/Lab	13039800 (2 credits) 13039810 (3 credits)	None	10-12
Occupational Safety and Environmental Technology I	N1303680 (1 credit)	None	9-12
Automotive Technology I: Maintenance and Light Repair	13039600 (2 credits)	None	9-12
Energy and Power of Transportation Systems	13039300 (1 credit)	None	10-12
Paint and Refinishing/Lab	13039900 (2 credits) 13039910 (3 credits)	None	10-12
Automotive Technology II/Lab	13039700 (2 credits) 13039710 (3 credits)	PREQ: Automotive Technology I: Maintenance and Light Repair	11-12
Practicum in Transportation Systems	13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits)	None	11-12
Practicum in Entrepreneurship	TBD	TBD	TBD
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE MANUFACTURING CAREER CLUSTER, PLEASE CONTACT:

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