# C. E. King High School Course Handbook 2024-25



## **Letter from the Principal**

Dear Students and Parents:

C. E. King High School is a class 6A high school serving approximately 3,000 students. We offer the standard high school program which is required by the state of Texas and much more. Our students have choices in areas ranging from fine arts to automotive. We offer many activities, clubs, and sports which provide our students the opportunities to find what interests them and have a place to belong.

Our purpose statement at King High School is "Educating Today for a Better Tomorrow". The courses we offer, the activities we provide, the special programs we make available, all work to that end, creating well rounded graduates prepared for the global society.

We will guide and support your child as they plan their high school years and beyond. We also want to include you, the parent, in this process as well. This handbook will provide you and your child with a great deal of information relating to courses offered, graduation plans, campus procedures and state mandates. Please take the time to read through this resource. We invite you to contact us if you have questions. Your student's high school years are extremely important. It is our plan to work with you and your student to ensure they meet their goals and are prepared for their post-secondary years, whether it is a career right out of high school or continuing their education through technical school, community college or university.



We are here to serve our students and parents. The staff at C.E. King High School and throughout Sheldon I.S.D is committed to providing the best education possible for our community. The Sheldon ISD Board of Trustees has provided the vision and has committed the resources needed for students to be successful. We look forward to working with each of you.

Sincerely,

Dr. Jillian Howard

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## **Course Handbook Overview**

This Sheldon ISD handbook is designed to provide curriculum information for the 2023-2024 school year. It is the responsibility of students and parents to ensure that all graduation requirements are met. This handbook will assist in course selections that will meet goals for the future as well as satisfy graduation requirements. This handbook reflects a curriculum that is designed to provide students with the skills and knowledge needed to meet the challenges and increasing demands of the work force and of colleges and universities.

According to the State of Texas, students are required to have twenty-six (26) credits to meet graduation requirements. Please see pages 5-12 for an explanation of the types of graduation programs that are required by the Texas Education Agency (TEA). The student must also pass all parts of the testing required of his/her graduation plan to receive a diploma. The student's transcript is the official record of all grades earned and all credits awarded. For the most current version of this handbook, visit the following website: <a href="https://www.khs.sheldonisd.com">www.khs.sheldonisd.com</a>.

It is the policy of the Sheldon Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in any of its programs, services, or activities as required by Title VI of the Civil Rights Act of 1964, as amended; by, Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

## **Planning For Your Educational Future**

Students should begin early by developing a course of study to ensure successful post-secondary pursuits of his or her choice. Entrance requirements and information for prospective students can be found with each KHS counselor or through electronic means from any college/university website. It is recommended that students and parents think in terms of a six-year plan that carries students through their first two years beyond high school.

- Take the Preliminary Scholastic Aptitude Test (PSAT) is during sophomore and junior years. Taking the PSAT the sophomore year exposes students to the format used on the SAT and allows the school and parents to identify areas of strength and weakness. National Merit Scholarship recipients are taken from PSAT candidates that take the test during their junior year only.
- Take the SAT/ACT examinations multiple times. Students' skills are varied and some perform better on the ACT than the SAT. It is recommended that students take both tests at least once. A sample schedule might include: PSAT—sophomore and junior fall semesters.



- SAT—January to March of junior year; ACT—spring to summer junior year; and SAT again fall of senior year. Most colleges
  accept applications in the fall of a student's senior year; therefore, it is important to have multiple results documented before the
  end of a senior's fall semester.
- Plan on a senior year filled with rigorous coursework and activities. A student's senior year should propel the student smoothly
  toward the next challenge. "Senior-itis" alludes to the "need" to relax and enjoy oneself prior to leaving high school. This mind set
  and culture greatly impairs a student's ability to succeed in an ever-changing, competitive society. A student's senior year should
  be focused on future academic pursuits.
- Participate in school-related activities and community service. Being involved in school programs and community service contributes to developing a well-rounded, sensitive, compassionate citizen. Institutes of higher learning are hypersensitive to a student's involvement in activities other than academics.
- Enroll in KHS courses that earn college credit while still a student in high school: Dual Credit courses, and/or AP courses. Students
  must remember that these are college level courses taught with rigor, high expectations and extra time outside of each class is
  expected.

#### **Naviance Family Connection**

Naviance Family Connection is a web-based service designed especially for students and parents. Naviance Family Connection is a comprehensive website that you can use to help in making decisions about colleges, scholarships and careers. Naviance Family Connection is linked with counselor's office, a service that is used to track and analyze data about college and career plans. It provides up-to-date information that is specific to your school.

Naviance Family Connection will allow students and parents to:

Get involved in the planning and advising process	Order transcripts, build a résumé, complete online surveys, and manage timelines and deadlines for making decisions about colleges and careers.
Take a Learning Style Inventory	The innovative Learning Style Inventory gives important insights about how students learn in order to help each student achieve maximum potential. The tool assesses the following dimensions that affect a student's learning: Immediate environment; Emotionality; Sociological needs; and Physical needs.
Research Careers	Naviance Family Connection offers the "Career Interest Profiler" as an online career interest assessment for students based on Holland's interest codes. The "Do What You Are" feature begins with a personality inventory and concludes with a report describing the student's personality type, potential careers, and related majors. The results link students directly to detailed career profiles, which include educational requirements, salary data, and in some cases even multimedia presentations. Students may also link directly to the college database to find colleges that offer an educational path to each career. The "Career Cluster Finder" will help students learn what career clusters may be a good match for you based on activities that interest them, personal qualities that they have and subjects that they enjoy studying in school. Students may watch and discover over 3,500 video archives through "Road Trip Nation" of various leaders across the country who have built their lives around their interests.
Strengths Explorer	Powered by Gallup, will help uncover student's talents and reveal potential strengths.
Multiple Intelligence Advantage	The MI Advantage assessment uses Multiple Intelligences theory to reveal students' intelligence strengths and challenges, and then provides suggestions on way to develop all their intelligences.
Apply for Scholarships	Check the most up-to-date list of scholarships that are on the local, state and national level.
Research Colleges	Compare GPA, standardized test scores, and other statistics to actual historical data from the school for students who have applied and been admitted in the past.
Sign up for College Visits	Find out which colleges are visiting the school and sign up to attend those sessions.

Naviance Family Connection also allows information to be shared with you about meetings and events, local scholarship opportunities, and other college and career web resources. This site can be also be used to send counselors e-mail messages. To logon students must go through their campus home page:

- C. E. King Middle School https://student.naviance.com/cekingmiddle
- Null Middle School https://student.naviance.com/michaelrnull
- C. E. King High School https://student.naviance.com/ceking

## Website Resources

Check out these websites...

#### Test Registration and Information

satsuite.collegeboard.org/satRegister for the SAT I and SAT II. And conduct college and financial aid searches.act.orgOnline registration for ACT

#### Interest Inventories and Career Information

interest inventories and car	<u>cer mjornation</u>
careerkey.org	Click on "Career Tests" in the left column; and then click "Take the Career Key" to help select
	a potential career interest. There is a fee of about \$8.
bls.gov/oco	Nationally recognized resource offers information on job responsibilities, earnings, and job
	prospects.
bls.gov/ooh/	The Occupational Outlook Handbook (OOH) is a career resource offering information on the
	hundreds of occupations that provide most of jobs in the United States. Each occupational
	profile describes the typical duties performed by the occupation, the work environment of that
	occupation, the typical education and training needed to enter the occupation, the median pay
	for workers in the occupation, and the job outlook over the coming decade for that occupation.
College Searches and Applic	cations
commonapp.org	Common application for over 200 private colleges and universities with complete instructions
	for applying online.
applytexas.org	The Common Application for Freshman Admission to Texas Public Colleges - Most colleges
	prefer this application and for it to be completed and submitted on-line.
bigfuture.collegeboard.org	Allows you to create a list of schools that meet your preferences for size, geography, areas of
	study, and student body. Link to the home pages of many universities and email the colleges'
	admissions offices for more information.
<u>collegenet.com</u>	Search for colleges using your defined criteria.
nces.ed.gov/collegenavigator/	Search for a school by name, location, program, degree offerings, or a combination of criteria.
collegeforalltexans.com	Here is everything a Texan needs to know about preparing for, applying for, and paying for
	college or technical school.
Financial Aid	
fastweb.com	Fastweb is a free scholarship search platform that connects students to college scholarships,
	trade school scholarships, and financial aid tools. Our goal is to help you find scholarships to
	make college or vocational school more affordable.
studentaid.gov	Federal student financial aid information from the U.S. Department of Education. The Free
	Application for Federal Student Aid, Title IV codes - This is the one application for need-based
	aid, such as grants and loans. Do not submit this application until your senior year!
collegeforalltexans.com	The Texas Application for State Financial Aid allows Texas residents to qualify for state aid.
	If you qualify for FAFSA you do not need to file this application.
chegg.com	Get step-by-step Textbook Solutions or ask homework questions to get expert answers, plus
	textbook rentals, writing and citation help, exam prep and more.
Selective Service	
WWW.SSS.gov	All males 18-25 must register for the selective service. Register online at this site.

## **Graduation Requirements**

#### For students entering 9th grade in 2014-2015 and beyond

House Bill 5 (HB 5), passed by the 83<sup>rd</sup> Texas Legislature and signed by the governor, provides for a new set of graduation plans for Texas students. These graduation plans consist of a foundation plan for every student and five endorsements from which students may

choose, depending on their interests. When selected, students will complete each of these endorsements with four Mathematics, four Science, four English Language Arts, and three Social Studies credits. Students are also required to complete two foreign language credits, one physical education credit, and one fine arts credit. Students entering 9<sup>th</sup> Grade must choose from one of the following endorsements:

- Arts and Humanities
- Business and Industry
- Public Services
- Science, Technology, Engineering, and Mathematics (STEM)
- Multidisciplinary Studies

To qualify as part of the top ten percent of their graduating class, students must complete an endorsement and successfully complete Algebra II.

## **State Testing**



Students are now required to pass five State of Texas Assessments of Academic Readiness (STAAR®) end-of-course (EOC) exams to meet the new graduation requirements:

- Algebra I
- Biology
- English I
- English II
- US History

## **High School Grade-Level Classification**

Promotion, grade-level advancement, and course credit shall be based on mastery of the curriculum. Grade-level advancement for students in grades 9 through 12 shall be determined by course credits and the student's original year of entry into grade nine. At the start of the school year, a students' grade level may be reclassified based on the number of credits the student has earned. The chart below shows how many credits students should earn to be considered in each grade level:

Grade Classification Requirements			
Freshmen (9)	0 to 4.5 credits earned		
Sophomore (10)	5.0 to 11.5 credits earned		
Junior (11)	12.0 to 17.5 credits earned		
Senior (12)	18.0 or more credits earned		

For more specific information about what classes are needed for graduation and the specific credits that have been earned, please check the Skyward Parent Portal and review graduation requirements. Please contact your counselor for more information.

## Foundation High School Program (FHSP)

This program contains up to four parts:

- A 22-credit foundation program which is the minimum standards required
- Five endorsement options that allow students to focus on a related series of courses
- A higher performance category called **Distinguished Level of Achievement**
- Performance Acknowledgments that note outstanding achievement

	Foundation Program					
English	Math	Science	Social Studies	Required	Electives	
English I (EOC)	Algebra I (EOC)	Biology (EOC)	World Geography or World History	PE 1.0 credit	Electives 5 credits	
English II (EOC)	Geometry	IPC, Chemistry, or Physics	US History (EOC)	Foreign Language 2.0 credits		
English III			Government and	Fine Arts		
Additional English	Additional Math	Additional Science	Economics	1.0 credit		Total Credits
English Credits 4.0	Math Credits 3.0	Science Credits 3.0	Social Studies Credits 3.0	Required Credits 4.0	Elective Credits 5.0	22
			Endorsement Op	otion		
English	Math	Science	Social Studies	Required	Electives	
	Additional Math	Additional Science	Additional Social Studies Recommended		Additional Elective	Total Credits
English Credits 4.0	Math Credits 4.0	Science Credits 4.0	Social Studies Credits 4.0	Required Credits 4.0	Elective Credits 6.0	26

#### Endorsement Options:\*

Arts and Humanities



Business and Industry



Public Services

#### \_Distinguished Level of Achievement\*\*

"Recommended plan for all Sheldon ISD students"

- Foundation Program requirements
- 4 credits in math including Algebra II
- 4 credits in science
- At least 1 endorsement

#### Sheldon ISD Recommended

- 4 credits in social studies
- Business Information Management I



Science, Technology, Engineering, and Mathematics (STEM)

Multidisciplinary Studies

#### Performance Acknowledgments

- Dual credit courses
- Bilingualism and biliteracy
- PSAT, ACT-ASPIRE, SAT or ACT
- Advanced Placement or International Baccalaureate exam
- Earning a nationally or internationally recognized business
   or industry certification or license

\*Distinguished Level of Achievement (DLA): Students must complete an endorsement and take Algebra II as one of the 4 math requirements in order to complete the DLA and be eligible for the Top 10%.

\*\*Endorsement Options: Students have the option to earn multiple Endorsements.

#### Benefits of the Distinguished Level of Achievement for Graduation

The information below is provided by the Texas Education Agency and is intended to be an overview of the general benefits of the FHSP plus Endorsements to include Algebra II. Sheldon ISD strongly encourages all students to research college admission requirements for the college or university they wish to attend. Many competitive college or university admission requirements may be more stringent than the requirements of Distinguished Level of Achievement (i.e. mathematics beyond Algebra II).

Choices determine options	Most of the very best jobs available now and in the future require education and training beyond a high school diploma. Whether you intend to pursue a high-demand, industry workforce credential from a community or technical college or a traditional four-year degree from a university, the choices made in high school will determine your future options. To best prepare yourself now for the transition to post-high school education or quality workforce training, choosing and taking the right classes is essential. The Distinguished Level of Achievement will ensure the best preparation for your future.
Why it matters — Benefits	The Distinguished Level of Achievement opens a world of educational and employment opportunities for you beyond high school. The Distinguished Level of Achievement will:
	<ul> <li>Allow you to compete for Top 10% automatic admissions eligibility at any Texas public university;</li> <li>Position you among those first in line for a TEXAS Grant (see page 18 for more information) to help pay for university tuition and fees; and</li> </ul>
	Ensure you are a more competitive applicant at the most selective colleges and universities.
Advantages	<ul> <li>Opportunity to earn an endorsement in an area of interest</li> <li>More college and university options</li> <li>More financial aid options</li> <li>Better preparation for college-level coursework at community/technical colleges and universities</li> <li>Opportunity for immediate enrollment in classes related to your chosen field of study</li> </ul>
	Opportunity for infinediate enforment in classes related to your chosen field of study

• Strong foundation to successfully complete an industry workforce credential or college degree

#### Performance Acknowledgements

Students may earn a performance acknowledge for outstanding performance through:

Dual credit courses	<ul> <li>Take at least 12 hours of college academic courses (with a grade of 3.0 or higher)</li> <li>Earn an associate degree while in high school</li> </ul>
Bilingualism and biliteracy	<ul> <li>Must complete English requirements (GPA of at least an 80)</li> <li>complete a minimum of 3 credits of LOTE courses with a minimum GPA of 80c</li> </ul>
	<ul> <li>demonstrate proficiency of TEKS for Level IV in LOTE with a minimum GPA of 80</li> <li>Completion of 3 credits in foundation subject area courses in LOTE with a minimum GPA</li> <li>Score of 3 or higher on AP exam in LOTE</li> <li>Score of 4 or higher on IB exam in LOTE</li> <li>Performance on a national assessment of language proficiency in LOTE of at least intermediate level</li> <li>Participated and met exit criteria for bilingual or ESL program</li> <li>Scored at the Advance High Level on TELPAS</li> </ul>
PSAT, ACT-ASPIRE, SAT or ACT	<ul> <li>PSAT: Score that qualifies student for recognition as a commended scholar or higher</li> <li>ACT-ASPIRE: Achieving the college readiness benchmark score on at least 2 of the 4 subject tests</li> <li>SAT: 410 on evidence-based reading and 520 on math</li> <li>ACT: Earning a composite score of 28 (excluding writing)</li> </ul>
Advanced Placement or International Baccalaureate exam	<ul> <li>Score of 3 or higher on AP exam</li> <li>Score of 4 or higher on IB exam</li> </ul>
Earning a nationally or internationally recognized business or industry certification or license	<ul> <li>Performance on an examination sufficient to obtain a nationally or internationally recognized industry certification</li> <li>Performance on an examination sufficient to obtain a government required credential to practice a profession</li> </ul>

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## **Arts and Humanities Endorsement**

#### Overview

Students in this endorsement will learn the best ways to figure out how to understand and relate to people whether it is through history, literature, or fine arts. Since the Arts and Humanities Endorsement covers a broad area,

**United State History** 

students will have to opportunity to prepare for hundreds of different careers. Careers such as audio recording, film and television, journalism, broadcasting, telecommunications, and historians are just a few options available to students in this area. Students have five options for completing an Arts and Humanities Endorsement.

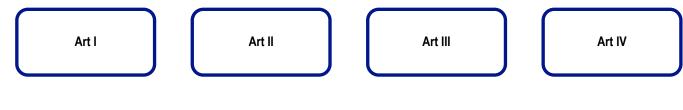
World History

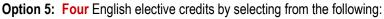
#### **Option 1:** A total of **five** credits in **social studies** (*example*):

World Geography



**Option 4:** A coherent sequence of **four** credits from one or two disciplines in Fine Arts (*example*):







Government and

**Economics** 

Independent Study in English Communications Applications

## C. E. King High School | Course Handbook 2024-25

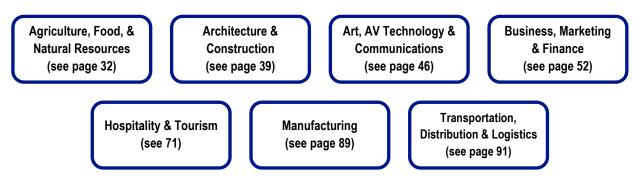
## **Business and Industry Endorsement**

#### Overview

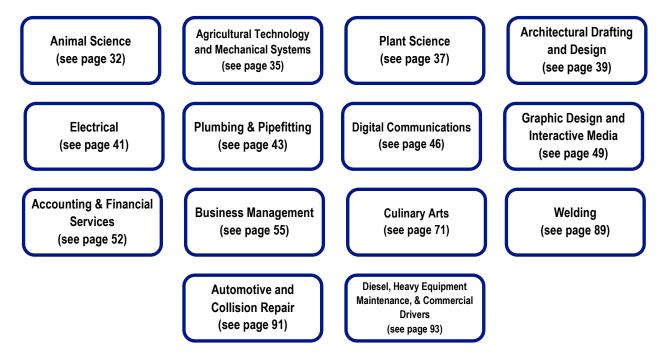
The Business and Industry Endorsement prepares students for success. Business impacts everything in our world, and business is flourishing in Texas. Ranging from small business owners to international corporate headquarters, there is a growing need for employees with technical skills, communication skills, time-management, organizational skills, and financial

knowledge. The Business and Industry Endorsement offers three options and eleven different pathways which means there is something here to interest almost everyone.

**Option 1:** A coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. The final CTE course in the sequence must be selected from one of the following career clusters:



**Option 2:** Courses required to complete a TEA-designated **Program of Study** related to Business and Industry:



**Option 3:** Four English elective credits to include 3 credits in the following area:



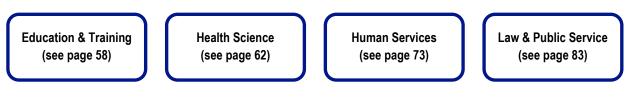


## **Public Service Endorsement**

#### Overview

The Public Service Endorsement is for students who are interested in making a lasting contribution to society by serving the community. This endorsement offers some of the most in-demand careers through five pathways.

**Option 1:** A **coherent** sequence of courses for **four** or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. The final CTE course in the sequence must be selected from one of the following career clusters:



**Option 2:** Courses required to complete a TEA-designated **Program of Study** related to Public Service:



Option 3: Four courses in Junior Reserve Officer's Training Corp (JROTC):



## Science, Technology, Engineering, and Mathematics (STEM) Endorsement



#### Overview

This endorsement includes courses directly related to science, technology (including computer science), engineering, and advanced mathematics. Students in this endorsement must successfully complete the following courses and select an option below.



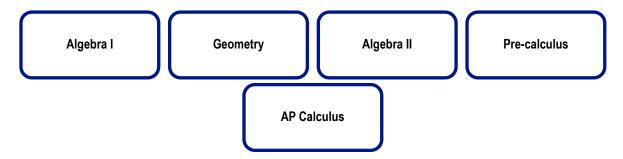
**Option 1:** A coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. The final CTE course in the sequence must be selected from one of the following career clusters:



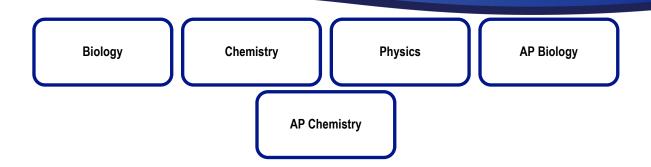
**Option 2:** Courses required to complete a TEA-designated **Program of Study** related to STEM:



Option 3: A total of five credits in math - two credits requiring Algebra II as a prerequisite (example):



**Option 4:** A total of **five** credits in **science** by successfully completing biology, chemistry, physics and two additional science courses (example):



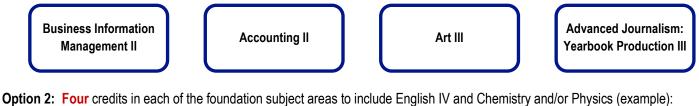
**Option 5:** In addition to Algebra II, Chemistry, and Physics, a coherent sequence of three additional credits from no more than two of the areas listed in Option 1, Option 2, Option 3, or Option 4.

## **Multidisciplinary Endorsement**

#### Overview

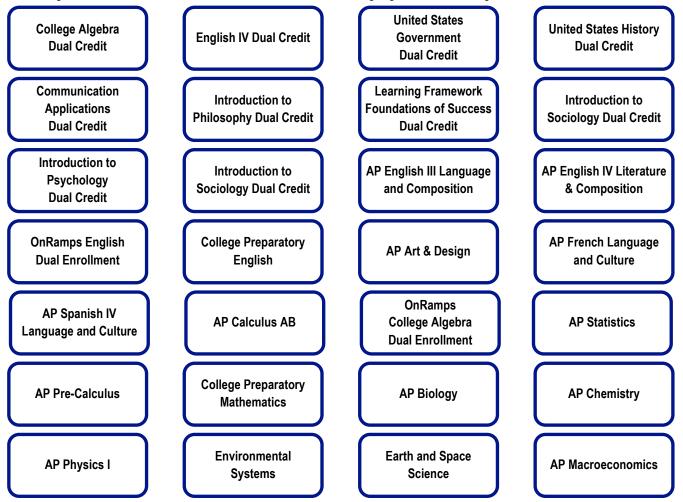
Students who pursue the Multidisciplinary Endorsement will have a broad prospective of education. This endorsement allows students to explore advance courses from other endorsements. Also, the Multidisciplinary Endorsement applies to students who want to take various dual credit or advance placement courses.

**Option 1:** Four advanced courses that prepare for workforce successfully or postsecondary education from within one endorsement area or among endorsement areas that are not in a coherent sequence (example):





**Option 3:** Four credits in Advance Placement, International Baccalaureate, dual credit, or district designated courses selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts. Courses include:





AP U.S. Government and Politics

**AP World History** 

## **General Registration Information**

#### **Daily Schedule of Classes**

C.E. King High School operates on a semester system with eight periods. One year's work will provide one credit in each course or a maximum total of eight credits per school year. Additional non-EOC credits may be earned in summer school, Star Lab after school and credit–by–exam.

#### **Scheduling Philosophy**

- Courses for the following year are selected during the spring semester of the student's prior year. Students meet with counselors in conferences to ensure proper academic placement.
- Think carefully about your selections, especially advanced level classes!
- Teachers and staff are hired, and the master schedule is set according to student selections; therefore, staffing needs are dependent upon the integrity of this process.

#### **Schedule Change Procedures**

No drops, adds, or schedule changes will be allowed after the first day of school. All requests for course changes need to be made by June 15th for the following school year. Exceptions will be made to this procedure if credit was previously earned for a course scheduled.

#### Possible reasons for schedule changes to be considered:

- A senior is not enrolled in a course REQUIRED for graduation.
- A student is scheduled into a class for which he/she already has credit.
- A student is scheduled into a class for which the student does not have the required prerequisite, did not apply, or try out for the program.
- An error in scheduling occurred.
- An academic level change occurs due to an academy committee's recommendation.

#### Possible reasons for schedule changes NOT to be considered:

- Requests for a teacher change
- Requests for a lunch change
- Requests for an elective change

#### Remember:

- If a student changes academic levels, the grade is not adjusted.
- In order to earn weighted grade points, a student must maintain a semester average of 70 and remain in the class for the entire semester.

## GPA

Course grade averages are reported in the familiar 100 - point system on the report card. Grade point average and class ranking are computed using the weighted 4.0 scale. This scale is used to weight the grades obtained in courses of varying levels of difficulty (Collegiate Rigor, Advanced Rigor, and General Rigor). The courses considered towards calculating the grade point average are the core courses -Mathematics, Social Studies, Science, English and Foreign Languages.

Percentage	Grade Letter	Collegiate Rigor	Advanced Rigor	General Rigor
100	A	6.0	5.0	4.0
99	А	5.9	4.9	3.9
98	А	5.8	4.8	3.8
97	А	5.7	4.7	3.7
96	А	5.6	4.6	3.6
95	А	5.5	4.5	3.5
94	А	5.4	4.4	3.4
93	А	5.3	4.3	3.3
92	A	5.2	4.2	3.2
91	A	5.1	4.1	3.1
90	A	5.0	4.0	3.0
89	В	4.9	3.9	2.9
88	В	4.8	3.8	2.8
87	В	4.7	3.7	2.7
86	В	4.6	3.6	2.6
85	В	4.5	3.5	2.5
84	В	4.4	3.4	2.4
83	В	4.3	3.3	2.3
82	В	4.2	3.2	2.2
81	В	4.1	3.1	2.1
80	В	4.0	3.0	2.0
79	С	3.9	2.9	1.9
78	С	3.8	2.8	1.8
77	С	3.7	2.7	1.7
76	С	3.6	2.6	1.6
75	С	3.5	2.5	1.5
74	С	3.4	2.4	1.4
73	С	3.3	2.3	1.3
72	С	3.2	2.2	1.2
71	С	3.1	2.1	1.1
70	С	3.0	2.0	1.0
69	F	0.0	0.0	0.0

Class rankings are calculated twice per year, once after the fall semester and thereafter following the completion of the spring semester.

## **Texas Grant Programs**

The State of Texas has developed several programs to encourage students to pursue a strong academic high school program which will adequately prepare them for further study as well as face challenges in the twenty-first century work place. These programs focus on admissions, grants, tuition exemptions, and financial aid, which will enable well-prepared, eligible students to attend public and non-profit institutions of higher learning in the State of Texas. Some programs specify that students must graduate under the Distinguished Level of Achievement High School Program.

#### **Top Ten Percent Admissions**

Applicants from accredited Texas schools who graduate in the top ten percent of their high school class shall be admitted to most general academic institutions if the students meet the following conditions:

- Must be a Texas resident or eligible to pay resident tuition;
- Must successfully complete the Distinguished Level of Achievement under the Foundation High School Program OR earn a score on the ACT or SAT Exams that meets the college readiness benchmarks;
- Apply no later than two years after graduating from high school;
- Submit a completed application prior to filing deadlines set by the college;



- Provide additional documents requested by the college, including essays, letters of recommendations, admissions tests and high school transcript.
- Note: Colleges may limit the number of first time freshmen eligible for admission due to enrollment caps. Although it is currently not a condition for admission under this program, it is advisable for high achieving, college bound students to plan to graduate under the Distinguished Level of Achievement High School Program. In some instances, students may be admitted to the university but not the college of choice within the university. Colleges may admit students on a first-come-first-admitted basis or may use a lottery system.

#### Toward Excellence, Access, and Success (TEXAS) Grant Program

The Texas Grant Program establishes grants to cover tuition and fees to Texas public and independent colleges and universities, including community colleges and technical schools for students with financial need who successfully complete the recommended or distinguished achievement high school graduation programs.

Students who continue in college and who meet program academic standards can receive awards up to 150 semester credit hours or six years, whichever comes first. In the first year of college, the academic standards are set by the institution. In subsequent years, the requirements are completion of least 75 percent of the hours taken in the prior semester, plus an overall grade point average in college of at least 2.5 on 4.0 scale.

Awards will be made through the financial office of the college. Persons interested in the program should contact the financial aid office to find out about deadlines and procedures.

#### Toward Excellence, Access, and Success (TEXAS) Grant II Program

The purpose of the program is to provide a grant of money to enable well-prepared eligible students to attend public community colleges, Technical colleges, or public state colleges in Texas. Students must be a Texas resident, have a financial need, enroll in the first thirty hours in college, and have not been convicted of a felony or a crime involving a controlled substance.

#### **Other Texas Financial Aid Programs**

Other scholarships, grants, and financial aid, including tuition exemption, loans, and work-study are available including a tuition rebate program from Texas public universities, the Texas B-On-Time student loan program, a loan repayment program for teachers, and the Tuition Equalization Grant (TEG). Students should begin preparing for these opportunities early in their high school years. Students should develop a portfolio, which shows evidence of high achievement in a strong academic program as well as contributions to their school and community by participating in extracurricular activities and community organizations and projects.

#### General Information

Texas Financial Aid Information Center Exemption Information Toll free: (877) 782-7322 1-800-242-3062, Ext 6387 1-888-311-8881 to get financial aid questions answered

Texas Higher Education Coordinating Board Web Address: https://www.highered.texas.gov/

## **Advanced Academic Courses**

#### What is the Advanced Placement program?

Advanced Placement (AP) is a program that allows high school students to participate in college level courses and possibly earn college credit while still in high school. The Advanced Placement courses are taught in high schools by qualified high school teachers with specialized training in AP instructional strategies. Pre-Advanced Placement (Pre-AP) classes challenge students to develop the skills that prepare them for the college-level work of AP courses. Sheldon ISD offers Advanced Placement courses to students who are ready and willing to engage in college level course content and rigorous academics. Courses are available in English, social studies, mathematics, science, Spanish, French, music, and art.

- Typically offered to juniors and seniors
- Academically challenging
- Require extensive reading and writing outside of class
- Weighted GPA
- Curriculum and placement exams are developed by The College Board
- Potential to earn college credit based on AP exam scores

The Advanced Placement curriculum is aligned to course descriptions governed by The College Board, a nationally recognized organization that also authorizes the syllabus of each AP teacher. Though The College Board outlines the course content, describes the curricular goals, and provides sample examination questions, AP teachers have the flexibility to determine how the content is presented.

#### **Benefits of Advanced Placement Courses**

Students who take AP courses will challenge themselves, sharpen their academic skills, and learn to think independently. AP students are provided the opportunity to earn college credit while in high school without paying tuition. Studies have shown that AP students are:

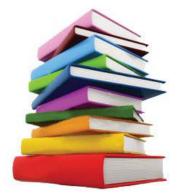
- Better prepared academically for college
- Able to perform significantly better over four years in college
- More likely to be leaders
- More apt to earn higher first-year GPAs in college

To learn more about the AP Program, review The College Board's website at https://apstudents.collegeboard.org/.

#### Earning College Credit

In May of each year, students are provided the opportunity to earn college credit by taking AP exams. Although not required, Sheldon ISD students enrolled in AP courses are expected to take the AP exam that accompanies the AP course in which the student is enrolled. If the student takes the associated AP exam, advanced placement and/or college credit may be awarded upon college entrance. Scores on the AP exam range from 1 (no recommendation) to 5 (extremely qualified). Each college or university determines the scores it will accept for credit, but most qualify a score of at least 3. Currently more than 90 percent of colleges and universities across the country offer college credit, advanced placement, or both, for qualifying AP Exam scores. Students can research The College Board website (https://apstudents.collegeboard.org/getting-credit-placement/search-policies) to review the Advanced Placement and credit policies for a specific college or university.

By earning a qualifying score on an AP exam, students can save thousands of dollars on college tuition, fees, and textbooks. The AP student is only responsible for the cost of each AP exam; however, limited financial assistance is available, and the cost of the exam is small compared to the costs associated with a typical college course. Over the past few years, the cost of each AP exam has ranged from \$15 to \$87, depending on the student's economic status and the availability of district scholarships, and national and state subsidies.



#### Enrolling in AP courses

Sheldon ISD encourages all students to pursue educational opportunities to meet their future goals, and follows The College Board policy of open enrollment. However, a decision about placement in advanced courses ultimately rests with the students and their parents. Families should communicate with teachers and counselors about the challenges of the advanced curriculum and the skills needed for student success. Any student with the guidance of a parent, teacher and counselor can enroll in an advanced course. Some AP courses may have prerequisite courses that must be completed prior to enrollment. Such courses are indicated in the course catalog. Students who choose to enroll should be prepared for the increased academic rigor of these courses. Upon successful completion of the course, the student receives high school credit.

#### The College Board's Equity and Access Policy Statement

"The College Board strongly encourages educators to make equitable access a guiding principle for their AP programs by giving all willing and academically prepared students the opportunity to participate in AP. We encourage educators to:

- Eliminate barriers that restrict access to AP for students from ethnic, racial, and socioeconomic groups that have been traditionally underserved.
- Make every effort to ensure their AP classes reflect the diversity of their student population.
- Provide all students with access to academically challenging coursework before they enroll in AP classes."

To enroll in an AP course, it is recommended that the student has passed the state assessment in the related subject area and select courses in their area(s) of strength. Students should also take advantage of Pre-AP courses that build the skills needed for success in AP courses. Students are encouraged to challenge themselves but also to find a balance among advanced courses, extra-curricular activities and outside activities. The decision about enrolling in multiple advanced courses simultaneously should be an individual decision based on the schedule, personal commitments and the interests of each student. Careful consideration should be given to the instructional needs of the individual student. Students and parents should be proactive about the academic support that may be needed to be successful in an advanced course. For example, AVID, an elective class, is available to students via an application process. AVID students receive academic, tutorial and motivational support during the school day to succeed in a college preparatory sequence.

#### **Attributes of Successful AP Students**

AP students are expected to work at an accelerated pace and to engage in outside reading and independent learning as if they were enrolled in a course at a college campus. Before enrolling in Pre-AP and AP courses, consider the following attributes of successful AP students:

- Intense interest in exploring the course material
- Strong personal commitment to accomplishing objectives and requirements of course
- Successful academic history of passing grades in the course content
- Ability to organize and dedicate approximately 3-8 hours weekly for studying and assignments
- Strong work ethic and perseverance when the content is challenging
- Completion of all prerequisite courses as listed in course handbook
- Independent and guided research
- Willingness to seek help (AVID, tutorials)
- · Commitment to extended reading and writing at home
- Adheres to deadlines for submitting work that meets the course requirements
- · Good attendance with the ability to resolve missed assignments quickly without prompting
- Strong critical thinking skills in the areas of reading, writing, and analysis



Parents and guardians of AP students should contact the student's teachers immediately if they have any concerns regarding the student's progress or have questions about whether or not a student should enroll in an AP course.

#### **Exiting AP Courses**

Students should conference with the teacher and seek help, such as tutorials, when experiencing difficulty in an advanced course. The parent/guardian of a Pre-AP or AP student can request a different level of placement after the parent, teacher, and student have implemented an intervention plan that has not proven effective within the first six weeks of school. A teacher might also initiate contact with the parent to recommend additional support or a different placement for a student who is failing the course. After the first six weeks, a student will not be allowed to exit a course without first convening a committee consisting of the student, his/her parent or guardian, the teacher, principal, and counselor. Students and parents will be provided with grades and assessment data prior to any decision that could result in a different placement. If a student is removed from an advanced course, the transfer grade and credit will follow the student. In addition, schedule changes are also contingent upon the availability of space in an equivalent content area classroom, and may result in the student's schedule being rearranged.

## **High School Credit Alternatives**

High school counselors can provide information, answer questions, and in some instances, help students enroll in courses outside the regular school day. The following options are available to Sheldon ISD students.

#### Credit-by-Exam without Prior Instruction

In accordance with the Texas Education Code 74.23, Sheldon ISD will administer examinations for specified courses to eligible students. Credit-by-exam will serve primarily as the vehicle for students to be given credit for a course they have not yet taken formally. The passing standard is a grade of 80+. A grade of 70 and credit earned on the credit-by-exam will be placed on the student's

transcript and will not be used in GPA and class rank calculations. Students wishing to take this exam should see their counselor for application. The exams are scheduled four times a year. Early in fall semester, end of fall semester, late in spring and again in the summer. The dates may vary within state influence.

#### Credit-by-Exam with Prior Instruction

Students who have engaged in study in a curriculum that cannot matched exactly with required TEKS of a course may consider credit-by-exam. These students may have studied in a foreign



country, a non-accredited school, home school, or want credit for summer enrichment courses both in and out of state. The passing standard is a grade of 70+. The passing grade and credit earned on the credit-by-exam will be placed on the student's transcript and will not be used in GPA and class rank calculations. A fee of \$19.00 is charged for each credit-by-exam with prior instruction if payment is received in time to be submitted with other tests being ordered.

All required end of course exams must be administered whether credit is gained through regular course work or credit by exam while enrolled in Sheldon. For more information, see your counselor.

High school students who meet district requirements for enrolling in the course and pass college readiness assessments may enroll in dual credit courses. Principal approval is required.

#### College Course Work – Dual Credit

A student may earn both high school credit and college credit through successful completion of approved college courses. A student will be awarded credit toward graduation only if he/she obtains prior approval from the appropriate district personnel. Specific requirements and procedures are available in the counselors' office.

#### S.T.A.R. Lab

Success through Academic Recovery is a program that utilizes a computer lab for curriculum support. Through the STAR Lab, students may be able to take courses not presently offered in the regular schedule or retake a course when credit has been lost. The STAR lab is offered after school for a fee of \$10.00 per course. See your counselor for more information.

## **Academic Dual Credit Program**

#### **Everyone Wins with Dual Credit**

Dual credit refers to a partnership between a school district and a university or college. A dual credit course is a college course taken by a high school student for which the student earns both high school and college credit. Academic dual credit courses may be taught at the high school or college location.

#### Get a Jump Start on College

Academic dual credit enables students to make substantial progress toward a college degree before they finish high school. Students who begin taking courses in their junior year might earn 24 or more college credits by the time they graduate from high school. Students learn what college professors expect and begin making successful transitions from high school to college.

#### Parents Save Money

Students are responsible for the academic dual credit tuition, fees, and textbooks. The tuition and fees, which can be paid in installments, are payable to San Jacinto College North. However, Sheldon ISD partners with colleges and universities that discount tuition as much as 75%. Parents especially appreciate the academic dual credit program because it is inexpensive and reduces their concerns about the rising costs of college.

	In District	Out of District	Non-Resident
Dual Credit Tuition and Fees	\$117.00	\$202.50	\$315.00
San Jacinto College Rates without the Dual Credit Discount	\$468.00	\$810.00	\$1,260.00

#### Estimated Costs for 6 hours of college credit (2 classes)

#### Academic Dual Credit Courses

Academic courses are those typically required of students who intend to transfer credits and pursue an associate or baccalaureate degree at a college or university. Core or elective courses are available in subjects such as English, history, math, science, sociology, psychology, speech, and business computing. Students are responsible for ensuring that dual credit courses will transfer to the fouryear university that they plan to attend. Dual credit students will also be required to take any corresponding STAAR End of Course exams. Grades are recorded on the high school transcript according to the Sheldon ISD grade point system. The college or university will also record grades on a separate college transcript.

#### Eligible Students

- Are full-time students at C.E. King High School
- Meet the Texas Success Initiative (TSI) admissions requirements of the college or university
- Receive approval of the high school principal
- Provide proof of current bacterial meningitis vaccine to high school nurse

#### Example Academic Dual Credit Course Sequence

Grade	Fall Term	Spring Term
11 <sup>th</sup> Grade	History 1301 and Education 1300	History 1302 and Speech 1315
12 <sup>th</sup> Grade	English 1301 and Government 2305	English 1302 and Government 2306

#### The Texas Success Initiative

The Texas Success Initiative (TSI) is a state mandate that requires students to be assessed in reading, writing and math skills prior to enrolling in college level courses. A high school student can demonstrate college readiness in math, reading and/or writing by achieving a readiness score on an assessment listed below:

Assessment	College Readiness in Reading and Writing	College Readiness in Math	
PSAT	Combined score of 107 with a minimum of 50 on the reading test (taken prior to 91/2015)	Combined score of 107 with a minimum of 50 on the math test (taken prior to 91/2015)	
STAAR End of Course Exams	Level 2 Final score of 4000 on English II EOC	Level 2 Final score of 4000 on Algebra 1 EOC with passing grade in Algebra II	
ACT	Composite score of 23 with 19 on English test	Composite score of 23 with 19 on math test	
SAT (prior to 3/5/2016)	Combined verbal and math score of 1070 with a minimum of 500 on the verbal test	Combined verbal and math score of 1070 with a minimum of 500 on the math test	
SAT (on or after 3/5/2016)	Minimum score of 480 on the Evidenced- Based Reading and Writing test	Minimum score of 530 on the math test	
Texas Success Initiative Assessment	Minimum score of 945 on the multiple-choice section with an essay score of 5-8, or less than 945 on the multiple-choice section, a diagnostic level of 5 or 6, and an essay score of 5-8	Minimum score of 950 or less than 950 and a diagnostic level 6	

The college-ready criteria are subject to change according to the Texas Higher Education Coordinating Board.

#### **Dual Credit Grade Conversion**

Beginning with the 2023-24 school year, a letter grade awarded for a student enrolled in a district approved dual credit course shall be converted to the following:

Letter Grade	Numerical Conversion
А	95
В	85
С	77
D	73
F	65
FX	50

#### Specialized Academic Dual Credit Programs

Sheldon ISD offers two academic programs which provide opportunities to earn an associate's degree while in high school:

#### C.E. King High School Modified Early College Academy (MECA)

MECA is a program designed by administrators and counselors of San Jacinto College North and Sheldon Independent School District to provide students the opportunity to earn high school credit while simultaneously earning an associate degree at San Jacinto College North. Students applying to the MECA program should be enrolled in Pre-AP Algebra II. MECA students enroll in 23-26 college credit hours (approximately eight college classes) during their junior and senior years of high school and attend at least one summer session prior to their junior year. The college credits are matched with the credits needed for high school graduation. Refer to the sample MECA college degree plan on page 24 and see a counselor for details.

#### Sheldon Early College High School

An initiative of the Texas Education Agency (TEA), ECHS campuses are innovative high schools that allow students an opportunity to earn a high school diploma and up to 60 college credit hours. Program goals include graduation from high school, meeting the Texas Success Initiative criteria for college entrance, and completing core college courses. ECHS students enroll in dual credit at no cost to parents, take rigorous, accelerated courses, and participate in academic and social support services to help them succeed. Sheldon ECHS, a partnership with San Jacinto College North, is a small learning community located on the C.E. King High School campus. Students in the ECHS begin taking college courses in the ninth grade. To achieve the TEA approval required to run an officially recognized ECHS, Sheldon ISD must apply for designation annually.

Each year, up to 120 eighth graders are accepted into the ECHS via an application process. Applications are available from eighth-grade counselors and on the Sheldon ISD website. Should more than the maximum number of applicants qualify for admission, a waiting list and/or lottery will determine admission. As per TEA, priority should be provided to at-risk students historically underrepresented in colleges and universities. Positions are filled until the first day of school. Military dependents and students transferring from another early college high school may apply upon enrollment in Sheldon Independent School District. The college degree plan follows the MECA plan and is individualized to meet each student's career goals.

#### University of Texas OnRamps

OnRamps is a dual-enrollment program designed to increase the number and diversity of students who engage in college courses designed by faculty at The University of Texas at Austin and taught by high school teachers. Sheldon ISD offers OnRamps course in English, College Algebra, and Physics. During the first semester, the student must complete the coursework and meet the academic requirements to earn college credit in the spring. The university professor will award students the appropriate grade based on their performance for the college course. The high school teacher will separately award credit for the grade earned in the high school course, which may differ from that for the college course. Students will achieve college hours on a University of Texas transcript by successfully completing the college course.

Unless grant or special funding is available, OnRamps requires a one-time, annual non-refundable fee per student for each course. The fee is due prior to the beginning of the fall semester and includes course materials, the learning management system, and technology tools.

OnRamps Annual Fee	\$149.00
Those who qualify for free and reduced lunch OnRamps Fee	Free



## MODIFIED EARLY COLLEGE ACADEMY (MECA)

## Sample Plan Below

(Plans may change according to degree)

Summer (Incoming Junior)	EDUC 1100	1
	MUSI 1310	3
Fall (Junior)	HIST 1301	3
	HUMA 1301	3
	MATH 1324	3
	ACCT 2301	3
Spring (Junior)	HIST 1302	3
	MATH 1325 or BUSI 2305	3
	ACCT 2302	3
	BUSI 2301 or BUSI 1301	3
Summer (Incoming Senior)	SPCH 1315	3
	SOCI 1301	3
Fall (Senior)	ENGL 1301	3
	GOVT 2305	3
	GEOL 1303/1103	4
	ECON 2301	3
Spring (Senior)	ENGL 1302	3
	GOVT 2306	3
	GEOL 1304/1104	4
	ECON 2302	3
		60

\* Mini courses and summer options are available. Courses in the MECA plan are subject to change based on the student's career plan and course availability.

## **Portrait of a Sheldon ISD Graduate**

A student who graduates from Sheldon ISD will be able to demonstrate the following characteristics:

#### Global Citizen

- · Respects and values individual rights, cultural and linguistic diversity, and heritage
- Demonstrates self-discipline, honesty, respect, and integrity
- Initiates and accepts personal accountability
- Maintains a balanced, healthy lifestyle
- Values others regardless of strengths/challenges
- Technologically skilled
- Promotes/seeks language learning
- Understands world issues and current events
- Geographically literate
- Participates actively in society
- Respects the environment
- Communicates effectively
- Ethical

#### **Effective Communicator**

- · Communicates clearly and skillfully, using a variety of techniques and media
- Uses technology to access, analyze, organize, and process information
- Participates actively
- Listens sensitively
- Provides and accepts appropriate feedback
- Recognizes the benefits of communicating in more than one language
- Effectively and courageously advocates for self and others
- Builds relationships
- Disagrees respectfully
- Compromises
- Sees problems from multiple perspectives
- Builds consensus
- · Recognizes that the group is stronger than its individual members
- Understands different audiences

#### **Academically Prepared**

- Technologically skilled
- Possesses constructive work habits and effective study skills
- Prepared to pursue post high school training, college, and/or certification
- Possesses 21st Century knowledge and skills to achieve a positive future

#### Self-Directed Learner

- Takes intellectual risks and learns from mistakes
- Recognizes that knowledge and skills must be acquired and applied in order to adapt to inevitable change
- · Continually seeks new avenues for personal and professional growth
- Intrinsically motivated and sets high expectations for self and others
- Demonstrates initiative and perseverance
- Demonstrates wise time management skills
- Accepts responsibility for own learning and achievement
- Sets and achieves individual academic learning goals for the future (college and career) and perseveres to achieve them
- Proactively seeks out information

#### **Collaborative Skills**

- Contributes to group efforts with ideas, suggestions, and hard work
- Demonstrates effective leadership skills by communicating ideas and motivating others
- Recognizes, appreciates, and respects others' points of view
- Builds consensus and negotiates appropriate solutions
- Values group members regardless of strengths/challenges
- Disagrees respectfully
- Takes a role/opinion/position within a group
- Compromises
- Sees problems or issues from multiple perspectives
- Recognizes that the group is stronger than individual members
- Leads, delegates, and collaborates in order to achieve a common, focused goal
- Listens actively and asks questions to seek understanding
- Seeks out collaborators beyond their peer group
- Builds relationships for meaningful discourse

#### Skilled Problem Solver

- Perceives and assesses problems and challenges
- Generates new ideas
- Adapts to changing environments
- Demonstrates skills in organization, analysis, interpretation, evaluation, and flexibility
- Identifies alternatives for conflict resolution and problem-solving in a timely manner
- Employs higher order thinking and sound reasoning
- · Asks effective questions to seek knowledge and construct meaning
- Utilizes organizational skills to set goals and create plans
- Takes intellectual risks with flexibility and tenacity
- Exhibits an independent work ethic
- Leverages strengths in tandem with global viewpoint to see problems from multiple perspectives
- Accesses and assembles resources to build consensus

## **Course Listings**

## **Career and Technical Education (CTE)**

#### CTE Offers Academic Courses and Programs that Provide:

- Rigorous training in today's most high-demand and high-growth career fields.
- Challenging curriculum integrated with core subjects, including English, math, and science.
- Hands-on activities based on real-world applications.
- Opportunities to complete graduation requirements and get a jumpstart on post-secondary goals.

#### CTE Prepares Students to Achieve Post-Secondary Goals:

#### Earn College Credit

#### Technical Dual Credit

Students enrolled in a technical dual credit CTE program have the opportunity to earn both high school and college credit upon successful completion of the program. Students must meet college requirements specific to the program they are interested in prior to enrolling in the technical dual credit CTE program. Speak with your counselor for additional information pertaining to technical dual credit CTE programs.

#### Specialized Dual Credit Programs

#### • STEM/PTECH Academy (Science, Technology, Engineering, and Math)

The STEM/PTECH Academy, a small learning community within the STEAM Academy, is an innovative model that allows students to earn a high school diploma, a STEM endorsement, and 24-30 college credits at no cost to students. The STEM/PTECH Academy curriculum, which includes problem-based learning (PBL) in the core and STEM elective classes, provides challenging hands-on learning experiences that encourage creativity, critical thinking, and problem solving. AVID supports STEM students with their rigorous high school and college coursework and their Biomedical Science, Cybersecurity, Engineering, and Computer Science programs of study. Specialized courses provide learning about biomedical field, robotics, computer programming, engineering, network systems, and creating applications (apps) for mobile devices. Students benefit from advanced academic and Career and Technical Education (CTE) courses, as well as career exploration and partnerships with college and businesses. College coursework is personalized to meet each student's career goals, and college credit can be earned through a variety of options, including Advanced Placement exams. In STEM capstone classes, students apply their skills and knowledge in real-world learning environments, such as internships and job shadowing.

#### • KNIT (King Nurses in Training)

The MED Academy includes the KNIT (King Nurses in Training) Community, a small learning cohort designed to implement innovative practices that prepare students to successfully complete a field of study (FOS) that leads to a high wage, high demand career as a registered nurse. Sheldon ISD harnesses the collective power of higher education and industry partnerships to provide KNIT to students with access to state-of-the-art nursing simulators, professionally trained mentors, and a high school elective class that embeds academic support during the school day for 30-34 hours of college credit. Through the advanced curriculum and clinical experiences, the KNIT program of study prepares students to apply their knowledge and marketable skills to real-world nursing activities. Also embedded in the curriculum are the skills needed to achieve college readiness benchmarks on the Texas Success Initiative Assessment (TSIA) and a score of 850 or higher on the HESI Admission Assessment Exam (HESI A2), an entrance exam for nursing schools, which are highly competitive. Students in the KNIT program must be committed to maintaining a college GPA of 3.5 and completing the field of study college courses by their senior year in high school. The Nursing Science program of study will serve 20 students per cohort via application process.



#### Gain Career and Workforce Readiness Skills and Knowledge

- Understand basic expectations of the workplace,
- Learn technical skills and knowledge required in today's careers through hands-on experiences,
- Job preparation,
- Earn industry certifications and licenses, and
- Build a strong resume and interviewing skills.

#### Programs of Study

A program of study (POS) is a sequence of CTE courses focused on one of the state's major industry sectors, or "career clusters." CTE programs of study offer students hands-on learning in their field of interest with the opportunity to earn industry certifications or dual credit hours that fulfill graduation requirements. In addition, they prepare students for post-secondary options such as employment, apprenticeships and college degrees.

Students should review the programs of study and course descriptions before creating or revising a personal graduation plan (PGP). Programs of study may vary somewhat from the plans set forth in this section due to individual student interests, course offerings, changes in state and local requirements, facility limitations, or staffing limitations, etc. You can find in-depth career information at the sites below.

College for All Texans Reality Check Workforce Solutions Career Exploration Career One Stop Big Future http://www.collegeforalltexans.com/ https://texasrealitycheck.com/ https://wrksolutions.com/for-individuals/career-exploration https://www.careeronestop.org/GetMyFuture/ https://bigfuture.collegeboard.org/

#### What are Career Clusters?

Career clusters help to ensure that learners are provided with the knowledge and skills needed for multiple career choices by matching what is taught in the classroom to business, industry, and post-secondary and higher education expectations. The 14 Texas Education Agency (TEA) Career Clusters include:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, A/V Technology and Communications
- Business, Marketing, and Finance
- Education and Training
- Energy
- Engineering

- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law and Public Service
- Manufacturing
- Transportation, Distribution, and Logistics

#### How Do Students Earn an Endorsement Through a Program of Study?

Under House Bill 5 (HB5) and the Foundation High School Program (FHSP), students must select at least one of the following endorsements:

- Arts & Humanities •
- **Business & Industry**
- **Public Services** •
- Science, Technology, Engineering, and Mathematics (STEM)
- **Multidisciplinary Studies**

To earn an endorsement, students must complete: 1) curriculum requirements for the FHSP, 2) an additional advanced math and advanced science credit, and 3) a program of study (i.e., coherent sequence), which qualifies for the intended endorsement area.

#### CTE Endorsement Programs of Study

endorsements career Cluster CTE Courses

The programs of study listed on the following pages are options available to C. E. King High School students and should guide course decisions each year. While not comprehensive of all district programs and classes, they are a good cross-section of focused areas of study. Every semester there are also dual credit classes available at San Jacinto Community College. Additional details on these classes can be found by contacting your counselor.

#### Career Preparation Courses

Some programs of study offer career preparation courses. Career Preparation courses are a work-based instructional arrangement in which students will develop essential knowledge and skills through classroom instruction and on -the- job training in an approved technical-specific area. each student will have an individual training plan that will address his/her job specific knowledge and skills. Students must provide their own transportation and a copy of their social security card upon employment. An application and an interview are required before enrollment in the course. Genesys Works is a paid internship with a Fortune 500 company available to seniors who meet specific criteria. Additional details on these courses can be found by contacting your counselor or the campus Career Preparation Coordinator.

#### **Career Preparation for Programs of Study Extended**

Grade: 12

Credit: 3 Age Requirement: At least 16 years old

Credit: 3

Career Preparation for Programs of Study provides additional opportunities for students to develop business and industry employment experiences, which must be related to the student's current program of study alongside advanced classroom instruction. The goal is to prepare students with a variety of skills to transition from job- to career-mindedness. This course provides a continuing focus on collaborative feedback between the employer, teacher, and student. Career Preparation for Programs of Study expands on Career Preparation General by increasing rigor, supporting student attainment of academic standards, and effectively preparing students for college and career success.

#### **Career Preparation General Extended**

#### Grade: 12

Age Requirement: At least 16 years old

Career Preparation General provides opportunities for students to participate in a work-based learning environment that incorporates continuous collaborative feedback between the employer, teacher, and student. This course combines classroom instruction with business and industry employment experiences that may be outside the student's current program of study. The goal is for students to obtain entry-level employment developing a variety of skills for obtaining and maintaining employment. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

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### Agriculture, Food, and Natural Resources

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.



## Program of Study: Animal Science

The Animal Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of animals and other living organisms. This program of study includes applying biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students will research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.

#### Courses

	Vet Med Pathway	Non-Vet Med Pathway		
9 <sup>th</sup> Grade	Principles of Agriculture, Food, and Natural Resources			
10 <sup>th</sup> Grade	Small Animal Management Equine Science Wildlife, Fisheries, and Ecology Management (Optional)			
11 <sup>th</sup> Grade	Livestock Production			
12 <sup>th</sup> Grade	Advanced Animal Science Veterinary Medical Applications Practicum in Agriculture, Food, and Natural Resources OR Career Preparation for Programs of Study	Advanced Animal Science Mathematical Applications in Agriculture, Food, and Natural Resources Practicum in Agriculture, Food, and Natural Resources OR Career Preparation for Programs of Study		

#### Aligned Advanced Academic Course(s)

AP Biology

#### Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Intern in a veterinary clinic, caring for animals and wildlife being treated in the clinic</li> <li>Earn industry certification</li> <li>Work with Sheldon Animal Care Center</li> </ul>	
Expanded Learning Opportunities	Sheldon FFA	

#### **Aligned Industry-Based Certifications**

- Certified Veterinary Assistant, Level 1 OR Elanco Veterinary Medical Applications Certification
- Elanco Fundamentals of Animal Science Certification



## Example Postsecondary Opportunities

#### Apprenticeships

Reproduction Technician

#### **Associate Degrees**

- Biological and Physical Sciences
- Entomology

#### **Bachelor's Degrees**

- Animal Science
- Zoology/Animal Biology

#### Master's, Doctoral, and Professional Degrees

- Marine Sciences
- Biotechnology

#### Additional Stackable IBCs/License

- Veterinarian
- Certified Veterinary Technician

#### **Example Aligned Occupations**

#### Veterinary Assistants and Laboratory Animal Caretakers Median Wage: \$29,906 Annual Openings: 1,348 10-Year Growth: 24%

# Veterinary Technologists and Technicians

Median Wage: \$33,679 Annual Openings: 1,217 10-Year Growth: 24%

#### Veterinarian

Median Wage: \$103,160 Annual Openings: 347 10-Year Growth: 26%

Successful completed of this program of study will fulfill requirements of the Business and Industry Endorsement. Approved Statewide Program of Study. C. E. King High School – 2024-25

C. E. King High School | Course Handbook 2024-25

**Animal Science Course Information** 

Credit: 1

Credit: 0.5

Credit: 0.5



Principles of Agriculture, Food & Natural Resources

Grade: 9-10

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for careers in agriculture, food, and natural resources. students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

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## **Small Animal Management**

Grade: 10-12

In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings.

In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

#### Wildlife, Fisheries, and Ecology Management (Optional)

Grade: 10-12

**Equine Science** Grade: 10-12

Credit: 1

Wildlife, Fisheries, and Ecology Management examines the management of game and non-game wildlife species, fish, and aquacrops and their ecological needs as related to current agricultural practices. To prepare for careers in natural resource systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to natural resources, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Mathematical Applications in Agriculture, Food, and Natural Resources (Satisfies a math credit)		13001000
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Grade: 11-12 Credit: 1 Prerequisite: Algebra I Recommended Prerequisite: one credit in Agriculture, Food, and Natural Resources

In Mathematical Applications in Agriculture, Food, and Natural Resources, students will apply knowledge and skills related to mathematics, including algebra, geometry, and data analysis in the context of agriculture, food, and natural resources. To prepare for careers in agriculture, food, and natural resources, students must acquire technical knowledge in the discipline as well as apply academic skills in mathematics. To prepare for success, students need opportunities to reinforce, apply, and transfer their knowledge and skills related to mathematics in a variety of contexts.

#### Level 3

**Livestock Production** 

Grade: 10-12

Credit: 1

In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry. To prepare for careers in the field of animal science, students must attain academic skills and knowledge, acquire knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.



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C. E. King High School | Course Handbook 2024-25

**Animal Science Course Information** 

#### Level 4

#### Advanced Animal Science (Satisfies a science credit)

#### Grade: 11-12

Prerequisite: Biology and Chemistry or IPC; Algebra I and Geometry; Small Animal Science or Equine Science or Livestock Production

Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences. To prepare for careers in the field of animal science, students must attain academic skills and knowledge, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Industry Based Certification: Elanco Fundamentals of Animal Science Certification

Credit: 1

Credit: 1

#### **Veterinary Medical Applications**

#### Grade: 11-12

Prerequisite: Small Animal Management, Equine Science or Livestock Production

Veterinary Medical Applications covers topics relating to veterinary practices, including practices for large and small animal species. To prepare for careers in the field of animal science, students must attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings.

Industry Based Certification: Elanco Veterinary Medical Applications Certification OR Certified Veterinary Assistant, Level 1

#### Practicum in Agriculture, Food, and Natural Resources - Animal Science

#### Grade: 12

Credit: 2 Prerequisite: 1 credit in an Agriculture. Food and Natural Resources course (Animal Science focus)

Practicum in Agriculture, Food, and Natural Resources is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. To prepare for careers in agriculture, food and natural resources, students must attain academic skills and knowledge, acquire technical knowledge and skills related to the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills and technologies in a variety of settings.

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## **Agriculture, Food, and Natural Resources**

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.



## Program of Study: Agricultural Technology and Mechanical Systems

Limited Seating

The Agricultural Technology and Mechanical Systems program of study focuses on occupational and educational opportunities associated with applying engineering technology and biological science to agricultural problems related to power and machinery, electrification, structures, soil and water use, and processing agricultural products. This program of study includes diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.

#### Courses

9 <sup>th</sup> Grade	Principles of Agriculture, Food, and Natural Resources
10 <sup>th</sup> Grade	Agricultural Mechanics and Metal Technologies
11 <sup>th</sup> Grade	Agricultural Structures Design and Fabrications
12 <sup>th</sup> Grade	Agricultural Equipment Design and Fabrication Career Preparation for Programs of Study (Optional)

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Participate in an FFA supervised agriculture experience</li> <li>Work with Sheldon Agricultural Engineering Works</li> </ul>
Expanded Learning Opportunities	Sheldon FFA

## **Aligned Industry-Based Certifications**

- NCCER Core
- AWS D1.1 Structural Steel



## Example Postsecondary Opportunities

#### Apprenticeships

Farm Equipment Mechanic I

#### **Associate Degrees**

- Diesel Mechanics Technology
- Industrial Mechanics and Maintenance Technology

#### **Bachelor's Degrees**

- Agricultural Engineering
- Agricultural Systems Management

#### Master's, Doctoral, and Professional Degrees

- Agricultural Engineering
- Industrial Technology

#### Additional Stackable IBCs/License

- Diesel Equipment Technology-Off Highway
   Specialization CER1
- Accredited Farm Manager

## **Example Aligned Occupations**

#### Farm Equipment Mechanics and Service Technicians Median Wage: \$46,582

Annual Openings: 326 10-Year Growth: 23%

#### Mobile Heavy Equipment Mechanics Median Wage: \$57,943 Annual Openings: 2,637 10-Year Growth: 31%

#### Farmers, Ranchers, and Other Agricultural Managers Median Wage: \$65,490 Annual Openings: 28,020 10-Year Growth: 4%



## Agricultural Technology and Mechanical Systems

## **Course Information**

## Principles of Agriculture, Food & Natural Resources Credit: 1

Credit: 1

#### Grade: 9-10

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities. personal development, globalization, industry standards, details, practices, and expectations. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

#### Level 2

Agricultural Mechanics and Metal Technologies		13002200
Grade: 10-12	Credit: 1	

Agricultural Mechanics and Metal Technologies is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal working techniques. To prepare for careers in agricultural power, structural, and technical systems, students must attain academic skills and knowledge: acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the industry; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings.

#### Level 3

Agricultural Structures Design and Fabrication

Grade: 11-12

Prereguisite: Agricultural Mechanics and Metal Technologies

In Agricultural Structures Design and Fabrication, students will explore career opportunities, entry requirements, and industry expectations. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural structures design and fabrication. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

Industry Based Certification: NCCER Core

#### Level 4

Agricultural Equipment Design and Fabrication

Grade: 11-12 Credit: 1 Prerequisite: Agricultural Structures Design and Fabrication

In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural equipment design and fabrication. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

Industry Based Certification: AWS D1.1 Structural Steel

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## **Agriculture, Food, and Natural Resources**

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.



## Program of Study: Plant Science

The Plant Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of plants and other living organisms. This program of study includes the application of biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

#### Courses

9 <sup>th</sup> Grade	Principles of Agriculture, Food, and Natural Resources
10 <sup>th</sup> Grade	Greenhouse Operation and Production
11 <sup>th</sup> Grade	Floral Design Horticultural Science
12 <sup>th</sup> Grade	Advanced Plant and Soil Science Advanced Floral Design OR Career Preparation for Programs of Study

## Aligned Advanced Academic Course(s)

- AP Biology
- AP Chemistry

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Work at a florist or landscaping business</li> <li>Work with Sheldon Blooms</li> </ul>
Expanded Learning Opportunities	Sheldon FFA

## **Aligned Industry-Based Certifications**

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



## Example Postsecondary Opportunities Apprenticeships

Horticulturist

## **Associate Degrees**

- Biology/Biological Sciences
- Biological and Physical Sciences
- **Bachelor's Degrees**
- Horticulture
- Plant Pathology/Phytopathology

## Master's, Doctoral, and Professional Degrees

- Plant Breeding
- Botany/Plant Biology

## Additional Stackable IBCs/License

- Nursery Floral License
- Horticulturist Certification

## **Example Aligned Occupations**

Pesticide Handlers, Sprayers, and Applicators, Vegetation Median Wage: \$46,153 Annual Openings: 205 10-Year Growth: 17%

#### **Biological Technicians**

Median Wage: \$45,787 Annual Openings: 879 10-Year Growth: 14%

Farmers, Ranchers, and Other Agricultural Managers Median Wage: \$65,490 Annual Openings: 28,020 10-Year Growth: 4%

Plant Science Course Information

Credit: 1

Credit: 1

#### Level 1

## Principles of Agriculture, Food & Natural Resources

#### Grade: 9-10

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

#### Level 2

Greenhouse Operation and Production

Grade: 10-12

**Horticultural Science** 

Greenhouse Operation and Production is designed to develop an understanding of greenhouse production techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills and technologies in a variety of settings.

#### Level 3

Grade: 10-12 Credit: 1 Horticultural Science is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings.

#### Floral Design (Satisfies a fine arts credit)

#### Grade: 11-12

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. To prepare for careers in floral design, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills and technologies in a variety of settings.

Industry Based Certification: Texas State Florist's Association Knowledge Based Floral Certification

Credit: 1

Credit: 1

Credit: 1

## Level 4

#### Advanced Plant & Soil Science (Satisfies a science credit)

#### Grade: 12

Recommended Prerequisite: Biology, IPC, Chemistry, or Physics; 1 credit in an Agriculture, Food and Natural Resources course

Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. To prepare for careers in plant and soil science, students must attain academic skills and knowledge, acquire technical knowledge and skills related to plant and soil science and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills and technologies in a variety of settings.

#### Advanced Floral Design

#### Grade: 12

Prerequisite: Floral Design

In Advanced Floral Design, students gain advanced knowledge and skills specifically needed to enter the workforce as floral designers or as freelance floral event designers, with an emphasis on specialty designs and occasion-specific designs and planning. Students are also prepared to enter postsecondary certification or degree programs in floral design or special events design. Students build on the knowledge base from Principles and Elements of Floral Design and are introduced to more advanced floral design concepts. In addition, students gain knowledge of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of an occasion or event.

Industry Based Certification: Texas State Florist's Association Level I Floral Certification

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## **Architecture and Construction**

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber and heating, air conditioning, and refrigeration technician.



## Program of Study: Architectural Drafting and Design

The Architectural Drafting and Design program of study focuses on occupational and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study includes reading, interpreting, and drawing blueprints for interior and exterior construction projects.

#### Courses

9 <sup>th</sup> Grade	Principles of Architecture
10 <sup>th</sup> Grade	Architectural Design I
11 <sup>th</sup> Grade	Architectural Design II
12 <sup>th</sup> Grade	Practicum in Architectural Design OR Career Preparation for Programs of Study

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Tour an architecture firm</li> <li>Work with Panther Architectural Works</li> </ul>
Expanded Learning Opportunities	SkillsUSA

## **Aligned Industry-Based Certifications**

- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Revit Architecture



## Example Postsecondary Opportunities

- Apprenticeships
- Drafter

## Associate Degrees

- CAD/CADD Drafting and/or Design Technology
- Drafting and Design Technology
- Surveying Technology/Surveying
- Architectural Drafting and Architectural CAD/CADD

## **Bachelor's Degrees**

- Civil Engineering
- Construction Engineering
- Surveying Engineering
- Drafting and Design Technology

## Master's, Doctoral, and Professional Degrees

- Civil Engineering
- Geographic Information Science and Cartography
- Construction Engineering Technology

## **Example Aligned Occupations**

Architectural and Civil Drafters Median Wage: \$57,424 Annual Openings: 1,366 10-Year Growth: 15%

#### Architects

Median Wage: \$80,903 Annual Openings: 966 10-Year Growth: 18%

#### **Construction Managers**

Median Wage: \$95,072 Annual Openings: 6,325 10-Year Growth: 24%



**Architectural Drafting and Design Course Information** 

#### Level 1

## **Principles of Architecture**

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#### Grade: 9-10

Credit: 1

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

#### Level 2

## **Architectural Design I**

Grade: 10-12 Prerequisite: Algebra I and English I Credit: 1 Recommended Prerequisite: Principles of Architecture

In Architectural Design I, students will gain knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design I includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.

#### Level 3

**Architectural Design II** 

Grade: 11-12

Credit: 2 Prerequisite: Architectural Design I and Geometry

In Architectural Design II, students will gain advanced knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design II includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.

Industry Based Certification: Autodesk Associate (Certified User) AutoCAD

#### Level 4

**Practicum in Architectural Design** 

Grade: 12 Prerequisite: Architectural Design II Credit: 2

Practicum in Architectural Design is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study.

Industry Based Certification: Autodesk Associate (Certified User) Revit Architecture



## **Architecture and Construction**

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber and heating, air conditioning, and refrigeration technician.



## Program of Study: Electrical (Dual Credit Program)

The Electrical program of study focuses on occupational and educational opportunities associated with installing, maintaining, and repairing electrical wiring, equipment, and fixtures. The program of study also addresses installing and repairing telecommunications cable including fiber optics.

#### Courses

9 <sup>th</sup> Grade	Principles of Architecture
10 <sup>th</sup> Grade	Architectural Design I
11 <sup>th</sup> Grade	Electrical Technology I @ San Jacinto College
12 <sup>th</sup> Grade	Electrical Technology II @ San Jacinto College

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Intern or shadow an electrician</li></ul>
Expanded Learning Opportunities	<ul><li>SkillsUSA</li><li>Earn dual credit hours</li></ul>

## **Aligned Industry-Based Certifications**

NCCER Electrical Level I



## Example Postsecondary Opportunities Apprenticeships

• Electrician

#### **Associate Degrees**

- Electrical and Power Transmission Installation
- Electrical Power and Controls
- Electromechanical Technology

#### **Bachelor's Degrees**

- Construction Engineering
- Electrical, Electronic, and Communications
- Engineering Electrical Engineering

#### Master's, Doctoral, and Professional Degrees

- Construction Engineering
- Construction Management

#### Additional Stackable IBCs/License

- Journeyman Electrician
- Master Electrician

## **Example Aligned Occupations**

#### **Electricians Helpers**

Median Wage: \$38,140 Annual Openings: 1,632 10-Year Growth: 20%

#### Electricians

Median Wage: \$54,769 Annual Openings: 9,221 10-Year Growth: 27%

#### **Construction Managers**

Median Wage: \$95,072 Annual Openings: 6,325 10-Year Growth: 24%



## Electrical Course Information

#### Level 1

## Principles of Architecture

13004600

13005600

Grade: 9-10

Credit: 1

Credit: 1

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

#### Level 2

#### Architectural Design I

Grade: 10-12 Prerequisite: Algebra I and English I Credit: 1 Recommended Prerequisite: Principles of Architecture

In Architectural Design I, students will gain knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design I includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.

#### Electrical Technology I @ San Jacinto College

Grade: 11-12

Prerequisite: Meet the San Jacinto College entrance requirements

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

#### Level 3

Electrical Technology II @ San Jacinto College		13005700
Grade: 11-12	Credit: 2	

Prerequisite: Electrical Technology I

In Electrical Technology II, students will gain advanced knowledge and skills needed to enter the workforce as an electrician, a building maintenance technician, or a supervisor; prepare for a postsecondary degree in a specified field of construction or construction management; or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, alternating current and direct current motors, conductor installation, installation of electrical services, and electric lighting installation.



## **Architecture and Construction**

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber and heating, air conditioning, and refrigeration technician.



## Program of Study: Plumbing & Pipefitting (Dual Credit Program)

The Plumbing and Pipefitting program of study focuses on occupational and educational opportunities related to assembling, installing, and repairing pipes, fittings, or fixtures of heating, water, and drainage systems. The program of study includes maintaining pipe supports and related hydraulic or pneumatic equipment for steam, hot water, heating, cooling, lubricating, and sprinkling.

#### Courses

	Plumbing/Pipefitting	Alternative Option
9 <sup>th</sup> Grade	Introduction to Welding	Introduction to Welding
10 <sup>th</sup> Grade	Welding I	Welding I
11 <sup>th</sup> Grade	Pipefitting Technology I @ San Jacinto College Pipefitting Technology II @ San Jacinto College Practicum in Construction Technology @ San Jacinto College	Welding II @ San Jacinto College
12 <sup>th</sup> Grade	Plumbing Technology I @ San Jacinto College Plumbing Technology II @ San Jacinto College Extended Practicum in Construction Technology @ San Jacinto College	Students may elect to complete only Plumbing <b>OR</b> only Pipefitting in this alternative option.

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Intern or shadow a plumber or pipefitter</li></ul>
Expanded Learning Opportunities	<ul><li>SkillsUSA</li><li>Earn dual credit hours</li></ul>

## **Aligned Industry-Based Certifications**

NCCER Core



## Example Postsecondary Opportunities Apprenticeships

- Plumber
- Pipefitter

#### **Associate Degrees**

- Pipefitting/Pipefitter and Sprinkler Fitter
- Construction Site Management
- Plumbing Technology
- Property Maintenance

#### **Bachelor's Degrees**

- Construction Engineering
- Construction Management

#### Master's, Doctoral, and Professional Degrees

- Construction Engineering
- Construction Management

## Additional Stackable IBCs/License

- Journeyman Plumber
- Master Plumber

## **Example Aligned Occupations**

Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters Median Wage: \$36,352 Annual Openings: 1,482 10-Year Growth: 26%

#### Plumbers, Pipefitters, and Steamfitters Median Wage: \$55,804 Annual Openings: 5,751

10-Year Growth: 22%

#### **Construction Managers**

Median Wage: \$95,072 Annual Openings: 6,325 10-Year Growth: 24%



#### Level 1

#### 13032250

#### Grade: 9

Credit: 1

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.

#### Level 2

# Welding I 13032300 Grade: 10 Credit: 2 Recommended Prerequisite: Introduction to Welding Introduction to Welding

Welding I provides the knowledge, skills, and technologies required for employment in metal technology systems. Students will develop knowledge and skills related to this system 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 prepare students for future success.

Pipefitting Technology I @ Sa	n Jacinto College	
Grade: 11-12	Credit: 1	
Prereguisite: Welding II		

Students will learn the types of work performed, responsibilities and career opportunities within the industry, and safety principles associated with pipefitting.

Plumbing Technology I @ Sa	n Jacinto College	13006000
Grade: 12 Prerequisite: Welding II	Credit: 1	

In Plumbing Technology I, students will gain knowledge and skills needed to enter the industry as a plumbing apprentice, building maintenance technician, or supervisor or prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in industry workplace basics and employer/customer expectations, including how to use a plumbing code book; how to identify and use power and hand tools; how to be safe on the jobsite and when using hand and power tools; how to apply basic plumbing mathematics and plumbing drawing; and how to identify, fit, and use plastic, copper, cast iron, carbon steel, and corrugated stainless steel pipe. In addition, students will be introduced to gas, drainage, and water supply systems and continue their knowledge of workplace basics and green technologies.



#### Level 3

## Welding II @ San Jacinto College 13032400 Grade: 11-12 Credit: 2 Prerequisite: Welding I Credit: 2

Welding II builds on the knowledge and skills developed in Welding I. Students will develop advanced welding concepts and skills as related to personal and career development. Students will integrate academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Pipefitting Technology II @ San Jacint	o College	N1300426
Grade: 11-12 Prerequisite: Pipefitting Technology I	Credit: 1	
Students will learn about, identify, and ins mathematics to solve problems related to	stall various types of piping systems and valves. Students will be able to read detail and drawing sheets and us pipefitting construction.	е

Plumbing Technology II @ San Jacinto College		N1300426
Grade: 12	Credit: 2	
Prerequisite: Pipefitting Technol	ogy I	

In Plumbing Technology II, students will gain the advanced knowledge and skills needed to enter the industry as a plumber, building maintenance technician, or supervisor or prepare for a postsecondary degree in mechanical engineering. Students will acquire knowledge and skills in plumbing codes, industry workplace basics, and employer/customer expectations, including tool and jobsite safety, advanced plumbing mathematics, commercial drawings, basic electricity, hanger installation, supports and structural penetrations, roof drains, fixture installation, valves and faucets, and oxy-fuel safety. Students will also learn about setup, cutting, brazing and welding water system sizing; gas, drain, waste and vent installation and testing; and water heater installation.

#### Level 4

## Practicum in Construction Technology @ San Jacinto College 13005250 Grade: 11-12 Credit: 2 Credit: 2

Prerequisite: Pipefitting Technology II

In Practicum in Construction Technology, students will be challenged with the application of knowledge and skills gained in previous construction-related coursework. In many cases students will be involved in projects the school has approved for this class.

Extended Practicum in Construction Technology @ San Jacinto College		13005255
Grade: 12	Credit: 2	
Prerequisite: Plumbing Technology II		

In Practicum in Construction Technology, students will be challenged with the application of knowledge and skills gained in previous construction-related coursework. In many cases students will be involved in projects the school has approved for this class. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom.

## Arts, A/V Technology and Communications

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.



## **Program of Study: Digital Communications**

The Digital Communications program of study focuses on occupational and educational opportunities associated with the production of audio and visual media formats for various purposes, such as TV broadcasts, advertising, video production, or motion pictures. The program of study includes operating machines and equipment such as microphones, sound speakers, video screens, projectors, video monitors, sound and mixing boards, and related electronic equipment to record sound and images.

#### Courses

9 <sup>th</sup> Grade	Principles of Arts, A/V Technology, and Communications Professional Communications Web Communications
10 <sup>th</sup>	Audio/Video Production I
Grade	Digital Design and Media Productions (Optional)
11 <sup>th</sup> Grade	Audio/Video Production II/Lab
12 <sup>th</sup> Grade	Practicum of Audio/Video Production OR Career Preparation for Programs of Study

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Work with Panther Productions</li></ul>
Expanded Learning Opportunities	SkillsUSA

## **Aligned Industry-Based Certifications**

- Adobe Certified Professional in Digital Video using Adobe Premiere Pro
- Adobe Certified Professional in Visual Design Using Adobe Photoshop

## Example Postsecondary Opportunities Apprenticeships

Light Technician

#### **Associate Degrees**

- Commercial and Advertising Art
- Animation, Interactive Technology, Video Graphics, and Special Effects

#### **Bachelor's Degrees**

- Cinematography and Film/Video Production
- Recording Arts Technology

## Master's, Doctoral, and Professional Degrees

- Animation, Interactive Technology, Video Graphics, and Special Effects
- Communications Technology

## Additional Stackable IBCs/License

 CompTIA Digital Media and Entertainment Professional Certification (DMEP)

## **Example Aligned Occupations**

#### Camera Operators, Television, Video, and Film Median Wage: \$48,422

Annual Openings: 155 10-Year Growth: 20%

## Audio and Video Technicians

Median Wage: \$46,319 Annual Openings: 626 10-Year Growth: 30%

#### **Producers and Directors**

Median Wage: \$65,029 Annual Openings: 522 10-Year Growth: 12%

## **Digital Communications**

Credit: 1

## **Course Information**

#### Level 1

#### Principles of Arts, Audio/Video Technology, and Communications

#### Grade: 9

Introduction to careers in the Arts, Audio/Video Technology, and Communications career cluster. These careers require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

Professional Communica	ations	13009900
Grade: 9-12	Credit: 0.5	
to be creative and have a solution oral and written communic	strong background in computer and technology applications, a	er-based environment. Careers in the global economy require individuals a strong and solid academic foundation, and a proficiency in professional o and expand the ability to write, read, edit, speak, listen, apply software

#### Web Communications

Grade: 9-12

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

Credit: 0.5

#### Level 2

#### Audio/Video Production I

#### Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Arts, Audio/Video Technology, and Communications

Credit: 1

Careers in audio and video technology and film production span all aspects of the audio/video communications industry. 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 industry with a focus on preproduction, production, and post-production audio and video products.

**Digital Design and Media Productions (Optional)** 

Grade: 10-12

Digital Design and Media Production will allow students to demonstrate creative thinking, develop innovative strategies, and use communication tools in order to work effectively with others as well as independently. Students will gather information electronically, which will allow for problem solving and making informed decisions regarding media projects. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will demonstrate a thorough understanding of digital design principles that is transferable to other disciplines. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

#### Level 3

Audio/Video Production II with Lab

Grade: 11-12

Prerequisite: Audio/Video Production I

Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production products. Through diverse forms of storytelling and production, students will exercise and develop creativity, intellectual curiosity, and critical-thinking, problemsolving, and collaborative skills. This course may be implemented in an audio format or a format with both audio and video.

Industry Based Certification: Adobe Certified Professional in Digital Video using Adobe Premiere Pro

Credit: 2

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**Digital Communications Course Information** 

## Level 4

Practicum in Audio/Video Production

#### Grade: 12

#### Credit: 2 Prerequisite: Audio/Video Production II with Lab

Building upon the concepts taught in Audio/Video Production II and its co-requisite Audio/Video Production II Lab, in addition to developing advanced technical knowledge and skills need for success in the Arts, Audio/Video Technology & Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying preproduction, production, and post-production audio and video products in a professional environment. This course may be implemented in an advanced audio/video or audio format. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

Industry Based Certification: Adobe Certified Professional in Visual Design Using Adobe Photoshop

## Arts, A/V Technology and Communications

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.



## **Program of Study: Graphic Design & Interactive Media**

The Graphic Design and Interactive Media program of study focuses on occupational and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. The program of study includes 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.

#### Courses

9 <sup>th</sup> Grade	Principles of Arts, A/V Technology, and Communications Professional Communications (Optional) Web Communications (Optional)
10 <sup>th</sup> Grade	Graphic Design and Illustration I Digital Design and Media Productions
11 <sup>th</sup> Grade	Graphic Design and Illustration II/Lab
12 <sup>th</sup> Grade	Practicum in Graphic Design and Illustration OR Career Preparation for Programs of Study

## Aligned Advanced Academic Course(s)

• AP Studio Art: Two-Dimensional Design Portfolio

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Work with King Designs</li></ul>
Expanded Learning Opportunities	SkillsUSA

## **Aligned Industry-Based Certifications**

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



#### Example Postsecondary Opportunities Associate Degrees

- Graphic Design
- Digital Arts

#### **Bachelor's Degrees**

- Web Page, Digital/Multimedia and Information Resources Design
- Design and Visual Communications

#### Master's, Doctoral, and Professional Degrees

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

## Additional Stackable IBCs/License

Certified Textile Designer (CTD)

## Example Aligned Occupations

Software Developers Median Wage: \$111,705 Annual Openings: 15,324

10-Year Growth: 36%

#### Graphic Designers

Median Wage: \$50,973 Annual Openings: 1,766 10-Year Growth: 10%

#### Art Directors

Median Wage: \$81,926 Annual Openings: 619 10-Year Growth: 18%

## **Graphic Design & Interactive Media**

## **Course Information**

#### Level 1

#### Principles of Arts, Audio/Video Technology, and Communications

#### Grade: 9

Introduction to careers in the Arts, Audio/Video Technology, and Communications career cluster. These careers require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

#### **Professional Communications (Optional)**

#### Grade: 9-12

Grade: 9-12

Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals

Credit: 0.5

Credit: 1

#### to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

#### Web Communications (Optional)

Credit: 0.5

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

#### Level 2

#### **Graphic Design and Illustration I**

#### Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Arts, Audio/Video Technology, and Communications

Credit: 1

Credit: 2

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

**Digital Design and Media Productions** 

#### Grade: 10-12

Digital Design and Media Production will allow students to demonstrate creative thinking, develop innovative strategies, and use communication tools in order to work effectively with others as well as independently. Students will gather information electronically, which will allow for problem solving and making informed decisions regarding media projects. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will demonstrate a thorough understanding of digital design principles that is transferable to other disciplines. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

#### Level 3

Graphic Design and Illustration II with Lab

Grade: 11-12

Prerequisite: Graphic Design & Illustration I

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills.

Industry Based Certification: Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator

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## **Course Information**

## Level 4

Practicum in Graphic Design and Illustration

#### Grade: 12

Prerequisite: Graphic Design & Illustration II with Lab

In addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, student will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

Industry Based Certification: Adobe Certified Professional in Visual Design Using Adobe Photoshop

Credit: 2



## **Business, Marketing, and Finance**

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. This career cluster includes occupations ranging from business owner and entrepreneur to accountant, retail manager, and market analyst.



## **Program of Study: Accounting & Financial Services**

The Accounting and Financial Services program of study focuses on occupational and educational opportunities associated with examining, analyzing, and interpreting financial records. It includes exploration of financial services, preparing financial statements, auditing financial statements prepared by others, and interpreting accounting records. This program of study also introduces students to mathematical modeling tools.

#### Courses

9 <sup>th</sup>	Principles of Business, Marketing, and Finance
Grade	Business Information Management (BIM) I
10 <sup>th</sup> Grade	Accounting I Banking and Financial Services Money Matters Virtual Business (Optional)
11 <sup>th</sup>	Accounting II
Grade	Business Management (Optional)
12 <sup>th</sup> Grade	Statistics and Business Decision Making (Optional) Practicum in Business Management OR Career Preparation for Programs of Study

## Aligned Advanced Academic Course(s)

AP Statistics

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Work on industry projects</li> <li>Work with Panther Business &amp; Financial Solutions</li> </ul>
Expanded Learning Opportunities	<ul> <li>Future Business Leaders of America (FBLA)</li> <li>UIL Accounting</li> </ul>

## **Aligned Industry-Based Certifications**

- Intuit QuickBooks Certified User
- Volunteer Income Tax Assistance/Tax Counseling Certification: Basic or Advanced



## Example Postsecondary Opportunities Associate Degrees

- Accounting
- Bookkeeping

#### **Bachelor's Degrees**

- Accounting
  - Banking and Financial Support Services

#### Master's, Doctoral, and Professional Degrees

- Business Administration and Management
- Finance

#### Additional Stackable IBCs/License

- Project Management Professional
- Property Tax Consultants Service Contract
   Providers

## **Example Aligned Occupations**

#### Tax Preparers Median Wage: \$56,956

Annual Openings: 898 10-Year Growth: 14%

#### Accountants and Auditors

Median Wage: \$78,022 Annual Openings: 12,989 10-Year Growth: 20%

## Personal Financial Advisors

Median Wage: \$77,605 Annual Openings: 1,877 10-Year Growth: 21%



**Accounting & Financial Services Course Information** 

#### Level 1

#### Principles of Business, Marketing, and Finance

#### Grade: 9-10

Credit: 1

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

#### **Business Information Management I**

Grade: 9-12

Recommended Prerequisite: Touch Systems and Data Entry

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

## **Money Matters** Grade: 10-12

Recommended Prerequisite: Principles of Principles of Business, Marketing, and Finance

Credit: 1

Credit: 1

In Money Matters, students will investigate money management from a personal financial perceptive. Students will apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to establish short term and long-term financial goals. Students will examine various methods of achieving short-term and long-term financial goals through various methods such as investing, tax planning, asset allocating, risk management, retirement planning, and estate planning.

#### Level 2

#### Accounting I

#### Grade: 10-12

#### Credit: 1

Recommended Prerequisite: Principles of Principles of Business, Marketing, and Finance

Accounting encompasses careers that record, classify, summarize, analyze, and communicate a business's financial information/business transactions for use in management decision making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.

Banking and Financial Serv	ices	13016300
Grade: 10-12	Credit: 0.5	
Recommended Prerequisite:	Principles of Principles of Business, Marketing, and Finance	

Banking services are primarily concerned with accepting deposits, lending funds, and extending credit. Banking services include cash management, short-term investments, mortgages and other loans, credit cards, and bill payment. Banking services are delivered via a number of different institutions, from commercial banks (the largest group) and other traditional means (savings and loans associations, credit unions, and local banks) to newer ventures through insurance companies, brokerage houses, and the Internet.

Virtual Business (Optional)		13012000
Grade: 10-12	Credit: 0.5	
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Virtual Business is designed for students to start a virtual business by creating a web presence, conducting online and off-line marketing, examining contracts appropriate for an online business, and demonstrating project-management skills. Students will also demonstrate bookkeeping skills for a virtual business, maintain business records, and understand legal issues associated with a virtual business.

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**Accounting & Financial Services** 

Credit: 1

## **Course Information**

#### Level 3

#### Accounting II (Satisfies a math credit)

#### Grade: 11-12

Prerequisite: Accounting I

Students continue to investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students reflect on this knowledge as they engage various managerial and cost accounting activities. Students formulate and interpret financial information for use in management decision-making.

Industry Based Certification: Intuit QuickBooks Certified User

Business Management (Optional)	1	3012100
Grade: 11-12	Credit: 1	
Business Management is designed to familiarize students with the concepts related to business management as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills.		cluding

#### Level 4

Statistics and Business Decision	Making (Satisfies a math credit) (Optional)	13016900
Grade: 12 Prerequisite: Algebra II	Credit: 1	

Statistics and Business Decision Making is an introduction to statistics and the application of statistics to business decision making. Students will use statistics to make business decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid.

#### **Practicum in Business Management**

Grade: 12

Credit: 2 Prerequisite: Business Information Management II OR Accounting II

Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the 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 business decisions.

Industry Based Certification: Volunteer Income Tax Assistance/Tax Counseling Certification: Basic or Advanced

13016700

## Business, Marketing, and Finance

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. This career cluster includes occupations ranging from business owner and entrepreneur to accountant, retail manager, and market analyst.



## **Program of Study: Business Management**

The Business Management program of study focuses on occupational and educational opportunities associated with planning, directing, and coordinating the administrative services and operations of an organization. It includes formulating policies, managing daily operations, and allocating the use of materials and human resources. This program of study also introduces students to mathematical modeling tools and organizational evaluation methods.

#### Courses

9 <sup>th</sup> Grade	Principles of Business, Marketing, and Finance Business Information Management (BIM) I
10 <sup>th</sup> Grade	Business Law Virtual Business Banking and Financial Services (Optional) Accounting I (Optional)
11 <sup>th</sup> Grade	Business Information Management (BIM) II Business Management OR Business Management (San Jacinto College Course) Human Resources Management
12 <sup>th</sup> Grade	Statistics and Business Decision Making Practicum in Business Management OR Career Preparation for Programs of Study

## Aligned Advanced Academic Course(s)

AP Statistics

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Work on industry projects</li> <li>Work with Panther Business &amp; Financial Solutions</li> </ul>
Expanded Learning Opportunities	Future Business Leaders of America (FBLA)

## **Aligned Industry-Based Certifications**

- Microsoft Office Specialist: Microsoft Word Expert
- Microsoft Office Specialist: Microsoft Excel Expert



## Example Postsecondary Opportunities Associate Degrees

- Business Administration and Management
- Human Resources Management

#### **Bachelor's Degrees**

- Business Analytics
- Accounting and Business

#### Master's, Doctoral, and Professional Degrees

- Business Administration and Management
- Organizational Leadership

## Additional Stackable IBCs/License

- Professional Certificate in Team Leadership
- Property Tax Professionals

## **Example Aligned Occupations**

First-Line Supervisors of Administrative Support Workers Median Wage: \$59,585 Annual Openings: 13,885 10-Year Growth: 9%

## Human Resources Specialists

Median Wage: \$61,278 Annual Openings: 6,239 10-Year Growth: 23%

#### **General and Operations Managers**

Median Wage: \$83,220 Annual Openings: 25,450 10-Year Growth: 23%



#### Level 1

#### Principles of Business, Marketing, and Finance Grade: 9-10 Credit: 1

**Business Management** 

Credit: 1

Credit: 1

Credit: 0.5

Credit: 1

**Course Information** 

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

#### **Business Information Management I**

Grade: 9-12

Recommended Prerequisite: Touch Systems and Data Entry

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

#### Level 2

**Business Law** 

Grade: 10-12

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

#### **Virtual Business**

Grade: 10-12

Recommended Prerequisite: Touch Systems and Data Entry

Virtual Business is designed for students to start a virtual business by creating a web presence, conducting online and off-line marketing, examining contracts appropriate for an online business, and demonstrating project-management skills. Students will also demonstrate bookkeeping skills for a virtual business, maintain business records, and understand legal issues associated with a virtual business.

Rusiness	Information	Manade	ement II
Daointooo		manag	

Grade: 11-12

Prerequisite: Business Information Management I

In Business Information Management II, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software. Students may earn Microsoft Office Specialist Certification.

Industry Based Certifications: Microsoft Office Specialist: Microsoft Word Expert and Microsoft Office Specialist: Microsoft Excel Expert

#### Accounting I (Optional)

Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Principles of Business, Marketing, and Finance

Accounting encompasses careers that record, classify, summarize, analyze, and communicate a business's financial information/business transactions for use in management decision making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.

#### Banking and Financial Services (Optional)

#### Grade: 10-12

Credit: 0.5 Recommended Prerequisite: Principles of Principles of Business, Marketing, and Finance

Banking services are primarily concerned with accepting deposits, lending funds, and extending credit. Banking services include cash management, short-term investments, mortgages and other loans, credit cards, and bill payment. Banking services are delivered via a number of different institutions, from commercial banks (the largest group) and other traditional means (savings and loans associations, credit unions, and local banks) to newer ventures through insurance companies, brokerage houses, and the Internet.

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## Business Management Course Information

## Level 3

#### **Business Management**

#### Grade: 10-12

Credit: 1

Credit: 1

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

Human Resources Manag	ement	13011900
Grade: 11-12	Credit: 0.5	
recruitment and employee	ment is designed to familiarize students with the concepts related to human resource selection methods, and employee development and evaluation. Students will also be ace safety, employee-management relations, and global impacts on human resource	come familiar with compensation and benefits
Level 4		
Statistics and Business D	ecision Making (Satisfies a math credit)	13016900

Grade: 12 Prerequisite: Algebra II

Statistics and Business Decision Making is an introduction to statistics and the application of statistics to business decision making. Students will use statistics to make business decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid.

Practicum in Business Management		13012200
Grade: 12	Credit: 2	

Prerequisite: Business Information Management II OR Accounting II

Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the 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 business decisions.

## **Education and Training**

The Education and Training career cluster focuses on planning, managing, and providing education and training services and related learning support services. All parts of courses are designed to introduce learners to the various careers available within the Education and Training career cluster. This career cluster includes a diverse spectrum of occupations, ranging from teaching assistant, classroom teacher, to school administrator.



## Program of Study: Teaching & Training

The Teaching and Training program of study focuses on occupational and educational opportunities associated with careers related to teaching, instructing, and creating instructional and enrichment materials. The program of study includes recognizing a variety of student groups and their corresponding needs, identifying processes for developing curriculum and coordinating educational content, and coaching groups and individuals.

#### Courses

9th	Principles of Education and Training	
Grade	Principles of Human Services (Optional)	
10 <sup>th</sup>	Child Development	
Grade	Human Growth and Development	
11 <sup>th</sup> Grade	Instructional Practices	
12 <sup>th</sup> Grade	Practicum in Education and Training	

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Intern as a teaching assistant or tutor</li> <li>Work with Future Panther Educators</li> </ul>	
Expanded Learning Opportunities	Texas Association of Future Teachers (TAFE)	

## Aligned Industry-Based Certifications

Educational Aide I



## Example Postsecondary Opportunities Apprenticeships

• Teacher Apprentice

#### **Associate Degrees**

- Adult and Continuing Education and Teaching
- Educational/Instructional Technology

#### **Bachelor's Degrees**

- Elementary Education and Teaching
- Secondary Education and Teaching

#### Master's, Doctoral, and Professional Degrees

- Educational Leadership and Administration, General
- Curriculum and Instruction

#### Additional Stackable IBCs/License

• Generalist, Grades EC-4

## **Example Aligned Occupations**

#### Teaching Assistants, Except Postsecondary Median Wage: \$28,066 Annual Openings: 10,000

10-Year Growth: 15%

#### Secondary School Teachers, Except Special Education and CTE Median Wage: \$61,035

Annual Openings: 8,288 10-Year Growth: 14%

Education Administrators, Kindergarten through Secondary Median Wage: \$81,976 Annual Openings: 2,676 10-Year Growth: 14%

Credit: 1

#### Level 1

#### Principles of Education and Training

#### Grade: 9-10

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.

Principles of Human Services		13024200
Grade: 9-10	Credit: 1	
and mental health, early childhood develop	ory course that will enable students to investigate careers in the Human Services Career Cluster, including pment, family and community, personal care, and consumer services. Each student is expected to complet s in high-skill, high-wage, or high-demand human services careers.	

#### Level 2

#### **Child Development** 13024700 Grade: 10-12 Credit: 1 Recommended Prerequisite: Principles of Education and Training OR Principles of Human Services

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

Human Growth and Development		15014500
Grade: 10-12	Credit: 1	

Recommended Prerequisite: Principles of Education and Training OR Principles of Human Services

Credit: 2

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

#### Level 3

**Instructional Practices** 

Grade: 11-12

Credit: 2 Prerequisite: Human Growth and Development OR Child Development

Instructional Practices is a field-based (practicum) internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high schoolaged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.

#### Level 4

Practicum in Education and Training

Grade: 12

Prerequisite: Instructional Practices

Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

Industry Based Certification: Educational Aide I

13014400

13014500

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## Engineering

The Engineering career cluster focuses on planning, designing, testing, building, and maintaining of machines, structures, materials, systems, and processes using empirical evidence and science, technology, and math principles. This career cluster includes occupations ranging from mechanical engineer and drafter to electrical engineer and to mapping technician.



## **Program of Study: Engineering Foundations**

The Engineering Foundations program of study focuses on occupational and educational opportunities associated with a wide range of skills applied in the Engineering industry. Students will design, test, and evaluate projects related to engines, machines, and structures. This program of study incudes applying scientific, mathematical, and empirical evidence to solve problems through innovation, design, construction, operation, and maintenance of different engineering systems.

#### Courses

9 <sup>th</sup> Grade	Introduction to Engineering Design (PLTW)	
10 <sup>th</sup> Grade	Engineering Science	
11 <sup>th</sup> Grade	Engineering Design & Development (PLTW)	
12 <sup>th</sup> Grade	Practicum in STEM - Engineering	

## Aligned Advanced Academic Course(s)

- AP Physics
- AP Calculus
- AP Statistics

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Work on industry projects</li> <li>Work with King Core of Engineers</li> </ul>
Expanded Learning Opportunities	SkillsUSA

## **Aligned Industry-Based Certifications**

- Autodesk Associate (Certified User) Inventor for Mechanical Design
- FAA Part 107 Remote Drone Pilot



## Example Postsecondary Opportunities Apprenticeships

 Industrial Engineering Technician Apprenticeship

#### **Associate Degrees**

- Manufacturing Engineering Technology/ Technician
- Robotics Technology/Technician

#### **Bachelor's Degrees**

- Electrical and Electronics Engineering
- Engineering, General

#### Master's, Doctoral, and Professional Degrees

- Electrical and Electronics Engineering
- Engineering, General

## Additional Stackable IBCs/License

- Professional Engineer (PE License)
- Engineer in Training Certification (EIT)

## Example Aligned Occupations

#### Civil Engineering Technologists and Technicians Median Wage: \$61,138

Annual Openings: 765 10-Year Growth: 11%

Aerospace Engineers Median Wage: \$115,694 Annual Openings: 483 10-Year Growth: 18%

#### Mechanical Engineers Median Wage: \$99,937 Annual Openings: 1,755 10-Year Growth: 19%

Successful completed of this program of study will fulfill requirements of the STEM Endorsement if the math and science requirements are met or the Business & Industry endorsement.

Approved Statewide Program of Study. C. E. King High School - 2024-25

## Engineering Foundations Course Information

## Level 1

## Introduction to Engineering Design (PLTW) Grade: 9-10 Credit: 1

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.

### Level 3

Grade: 10-12 Credit: 1

Engineering Science (Satisfies a science credit)

Prerequisite: Algebra I and Biology, Chemistry, IPC, OR Physics

Students enrolled in the Engineering Science course explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

#### Engineering Design & Development (PLTW)

Grade: 11-12 Prerequisite: Engineering Science

The knowledge and skills students acquire throughout engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

Industry Based Certifications: Autodesk Associate (Certified User) Inventor for Mechanical Design

Credit: 1

#### Level 4

Grade: 12

Practicum in Science, Technology, Engineering, and Math - Engineering

Credit: 2

Prerequisite: Algebra I and Geometry; two Engineering Career Cluster Courses

This Practicum in Science, Technology, Engineering, and Mathematics is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Although periods should be adhered to in order to provide students with experience, completion of skill sets may be demonstrated throughout the practicum; thus, units do not have to be delivered. This course will focus on Drones.

Industry Based Certifications: FAA Part 107 Remote Drone Pilot



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## Health Science

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.



## Program of Study: Biomedical Science

The Biomedical Science program of study focuses on occupational and educational opportunities associated with the study of biology and medicine. This program of study includes researching and diagnosing diseases, pre-existing conditions, and other determinants of health. Students will also practice patient care and communication.

#### Courses

9 <sup>th</sup> Grade	Principles of Biomedical Science (PLTW)
10 <sup>th</sup>	Human Body Systems (PLTW)
Grade	Medical Terminology
11 <sup>th</sup>	Medical Interventions (PLTW)
Grade	Anatomy and Physiology
12 <sup>th</sup> Grade	Practicum in STEM - Biomedical

## Aligned Advanced Academic Course(s)

- AP Biology
- AP Chemistry

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Work on industry projects</li></ul>	
Expanded Learning Opportunities	Health Occupation Students of America (HOS	

## **Aligned Industry-Based Certifications**

• Biotechnician Assistant Credentialing Exam (BACE)



## Example Postsecondary Opportunities

## Apprenticeships

Medical Laboratory Technician

## Associate Degrees

- Biotechnology
- Biological Sciences

#### Bachelor's Degrees

- Biology
- Cellular and Molecular Biology

#### Master's, Doctoral, and Professional Degrees

- Forensic Science and Technology
- Biomedical Sciences

#### Additional Stackable IBCs/License

Cytotechnologist

## **Example Aligned Occupations**

#### Medical Equipment Preparers Median Wage: \$38,827 Annual Openings: 519 10-Year Growth: 18%

Forensic Science Technicians Median Wage: \$56,971 Annual Openings: 249 10-Year Growth: 22%

Biological Technicians Median Wage: \$45,787 Annual Openings: 879 10-Year Growth: 14%

Successful completed of this program of study will fulfill requirements of the Public Services endorsement or the STEM endorsement if the math and science requirements are met.

Approved Statewide Program of Study. C. E. King High School – 2024-25

## Biomedical Science Course Information

Credit: 1

#### Level 1

#### Principles of Biomedical Science (PLTW)

#### Grade: 9-12

Students explore concepts of biology and medicine as they take on roles of different medical professionals to solve real-world problems. Over the course of the year, students are challenged in various scenarios including investigating a crime scene to solve a mystery, diagnosing and proposing treatment to patients in a family medical practice, to tracking down and containing a medical outbreak at a local hospital, stabilizing a patient during an emergency, and collaborating with others to design solutions to local and global medical problems.

#### Level 2

# Human Body Systems (PLTW) N1302093 Grade: 10-12 Credit: 1 Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

# Medical Terminology Credit: 1 Grade: 10-12 Credit: 1 The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

#### Level 3

Medical Interventions (PLTV	<b>v</b> )	N1302094
Grade: 10-12	Credit: 1	
screen and evaluate the code	in human DNA; evaluate cancer treatment options	diagnose, and treat disease. Students explore how to detect and fight infection; ns; and prevail when the organs of the body begin to fail. Through real-world cases, ry, genetics, pharmacology, medical devices, and diagnostics.

Anatomy and Physiology (Satisfies a science credit)		13020600	
Grade: 11-12	Credit: 1	GPA: 5.0	
Prerequisite: 1 credit in Biolo	ogy AND 1 credit in Chemistry, IPC, or Ph	ysics	

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

#### Level 4

Practicum in Science, Technology, Engineering, and Math - Biomedical		13037400
Grade: 12	Credit: 2	
Prereguisite: Algebra I a	nd Geometry: two Biomedical Science POS courses	

This practicum in Science, Technology, Engineering, and Mathematics is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Although periods should be adhered to in order to provide students with experience, completion of skill sets may be demonstrated throughout the practicum; thus, units do not have to be delivered.

Industry Based Certification: Biotechnician Assistant Credentialing Exam (BACE)



## **Health Science**

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.



## Program of Study: Diagnostic & Therapeutic Services (KHS Pathways)

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

#### Courses

	Diagnostic Pathway	Therapeutic Pathway*
9 <sup>th</sup> Grade Principles of Health Science		Principles of Health Science
10 <sup>th</sup> Grade Medical Terminology		Medical Terminology Pharmacy I
11 <sup>th</sup> Grade	Health Science Theory Anatomy and Physiology	Health Science Theory Anatomy and Physiology
12 <sup>th</sup> Grade	Practicum in Health Science	Pharmacology Practicum in Health Science

\* This Program of Study will end in 2025.

## Aligned Advanced Academic Course(s)

- AP Biology
- AP Chemistry

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility</li> <li>Participate in job shadowing experiences at hospital/clinical</li> </ul>
Expanded Learning Opportunities	Health Occupation Students of America (HOSA)

## **Aligned Industry-Based Certifications**

• Certified EKG Technician OR Pharmacy Technician



## Example Postsecondary Opportunities

#### **Apprenticeships**

Medical Assistant

#### **Associate Degrees**

- Emergency Medical Technology
- Radiologic Technology/Science

#### **Bachelor's Degrees**

- Emergency Medical Technology
- Medical Insurance Coding

#### Master's, Doctoral, and Professional Degrees

- Medicine
- Occupational Therapy

#### Additional Stackable IBCs/License

Registered Diagnostic Medical Sonographer

## **Example Aligned Occupations**

#### Medical Assistants

Median Wage: \$36,834 Annual Openings: 11,638 10-Year Growth: 29%

#### **Dental Hygienists**

Median Wage: \$79,663 Annual Openings: 1,352 10-Year Growth: 32%

#### **Physician Assistants**

Median Wage: \$127,332 Annual Openings: 974 10-Year Growth: 41%

Successful completed of this program of study will fulfill requirements of the Public Services endorsement or the STEM endorsement if the math and science requirements are met.

Approved Statewide Program of Study. C. E. King High School – 2024-25



## **Diagnostic and Therapeutic Services (KHS Options)**

## **Course Information**

#### Level 1

#### **Principles of Health Science** 13020200 Grade: 9-10 Credit: 1 The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. 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. Level 2 **Medical Terminology** 13020300

#### Grade: 10-12

Credit: 1

The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

#### Pharmacy I Grade: 10-11 Credit: 1

Recommended Prerequisite: Principles of Health Science and Biology

In Pharmacy I students build on their existing foundation of knowledge and skills needed to pursue a career in the pharmaceutical field such as a pharmacy technician or pharmacist). Instruction includes pharmacokinetics, pharmacy law, medication safety, the dispensing process, and inventory.

#### Level 3

#### **Health Science Theory** 13020400 Grade: 10-12 Credit: 1 Prerequisite: Biology

The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

Anatomy and Physiology (Satisfies a science credit)			13020600
Grade: 11-12 Proroguisito: 1 gradit in Piolog	Credit: 1	GPA: 5.0	
Prerequisite. T creait in Biolog	gy AND 1 credit in Chemistry, IPC, or Physics		

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

#### Level 4 13020950 Pharmacology Credit: 1 Grade: 11-12 Prerequisite: Biology and Chemistry Recommended Prerequisite: 1 credit from Health Science cluster The Pharmacology course is designed to study how natural and synthetic chemical agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care. It is an ever-changing, growing body of information that continually demands greater amounts of time

**Practicum in Health Science** 

and education from health care workers.

Grade: 12 Prerequisite: Health Science Theory and Biology

The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills in Health science. Practicum experiences offer a variety of opportunities to pursue a career in the health care industry. Students are expected to apply the knowledge and skills necessary to pursue a health science certification or licensure through further education and employment and are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

Industry Based Certifications: Certified EKG Technician OR Pharmacy Technician

Credit: 2

13020500

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## **Health Science**

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.



## **Program of Study: Diagnostic & Therapeutic Services (Dual Credit Options)**

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

#### Courses

	Medical Assisting	Pharmacy	
9 <sup>th</sup> Grade	Principles of Health Science Business Information Management (BIM) I	Principles of Health Science Business Information Management (BIM) I	Example Postsecondary Opportunities
10 <sup>th</sup> Grade	Health Science Theory	Health Science Theory Pharmacy I	Apprenticeships     Medical Assistant
11 <sup>th</sup> Grade	Medical Terminology @ San Jacinto College Business English @ San Jacinto College Health Informatics @ San Jacinto College Anatomy and Physiology @ San Jacinto College	Anatomy and Physiology Medical Terminology @ San Jacinto College Pharmacy II @ San Jacinto College	<ul> <li>Associate Degrees</li> <li>Emergency Medical Technology</li> <li>Radiologic Technology/Science</li> <li>Bachelor's Degrees</li> <li>Emergency Medical Technology</li> <li>Medical Insurance Coding</li> <li>Master's, Doctoral, and Professional Degrees</li> </ul>
12 <sup>th</sup> Grade	Pathophysiology @ San Jacinto College Practicum in Health Science @ San Jacinto College	Pharmacology @ San Jacinto College Mathematics for Medical Professionals @ San Jacinto College Practicum in Health Science @ San Jacinto College	<ul> <li>Medicine</li> <li>Occupational Therapy</li> <li>Additional Stackable IBCs/License</li> <li>Registered Diagnostic Medical Sonographer</li> <li>Example Aligned Occupations</li> </ul>
			Medical Assistants

## Aligned Advanced Academic Course(s)

- AP Biology
- **AP Chemistry**

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility</li> <li>Participate in job shadowing experiences at hospital/clinical</li> </ul>
Expanded Learning Opportunities	<ul> <li>Health Occupation Students of America (HOSA)</li> <li>Earn dual credit hours</li> </ul>

#### Medical Assistants

Median Wage: \$36,834 Annual Openings: 11,638 10-Year Growth: 29%

#### **Dental Hygienists**

Median Wage: \$79,663 Annual Openings: 1,352 10-Year Growth: 32%

#### **Physician Assistants**

Median Wage: \$127,332 Annual Openings: 974 10-Year Growth: 41%

Successful completed of this program of study will fulfill requirements of the Public Services endorsement or the STEM endorsement if the math and science requirements are met.

Approved Statewide Program of Study. C. E. King High School - 2024-25



## **Diagnostic and Therapeutic Services (Dual Credit Options) Course Information**

#### Level 1

#### **Principles of Health Science** 13020200 Grade: 9-10 Credit: 1 The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. 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.

Business Information Management I (Required for Medical Assisting Pathway)

Grade: 9-12

Credit: 1 Recommended Prerequisite: Touch Systems and Data Entry

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

#### Level 2

#### **Medical Terminology**

#### Grade: 10-12

The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

Note: Medical Assisting Pathway students will be taking this course at San Jacinto College.

Credit: 1

#### N1302127 Pharmacy I Grade: 10-11 Credit: 1 Recommended Prerequisite: Principles of Health Science and Biology

In Pharmacy I students build on their existing foundation of knowledge and skills needed to pursue a career in the pharmaceutical field such as a pharmacy technician or pharmacist). Instruction includes pharmacokinetics, pharmacy law, medication safety, the dispensing process, and inventory.

#### Level 3

Health Science Theory		13020400
Grade: 10-12 Prereauisite: Bioloay	Credit: 1	

The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

Note: Pharmacy Pathway students will be taking this course at San Jacinto College.

Health Informatics @ San Jacinto College		13020960
Grade: 11-12	Credit: 1	

Prerequisite: Medical Terminology

The Health Informatics course is designed to provide knowledge of one of the fastest growing areas in both academic and professional fields. The large gap between state of the art computer technologies and the state of affairs in health care information technology has generated demand for information and health professionals who can effectively design, develop, and use technologies such as electronic medical records, patient monitoring systems, and digital libraries, while managing the vast amount of data generated by these systems.

13020300



#### Level 3, Continued

#### Pharmacy II @ San Jacinto College

#### Grade: 11-12

Prerequisite: Pharmacy I, Biology and Chemistry

The Pharmacy II course provides students with the advanced knowledge and skills to explore various careers in the pharmacy field, including pharmacology, pharmacy law, medication errors, inventory pharmacy calculations, compounding, and workflow expectations in a pharmacy setting. Pharmacy II is designed to be the third course in a pathway leading to college and career readiness in the healthcare therapeutics professions.

#### Anatomy and Physiology (Satisfies a science credit)

Grade: 11-12

Credit: 1 Prerequisite: 1 credit in Biology AND 1 credit in Chemistry, IPC, or Physics GPA: 5.0 (6.0 for San Jacinto College course)

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

Note: Medical Assisting Pathway students will be taking this course at San Jacinto College.

Credit: 1

Credit: 1

#### Level 4

Business English @ San Jac	into College	13011600
Grade: 11-12 Prerequisite: English III	Credit: 1	

In Business English, students enhance communication and research skills by applying them to the business environment, in addition to exchanging information and producing properly formatted business documents using emerging technology.

#### Pathophysiology @ San Jacinto College

Grade: 12

Prerequisite: Biology and Chemistry

The Pathophysiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology will study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.

Pharmacology @ San Jacinto College			13020950
Grade: 11-12 Prerequisite: Biology and Chemistry	Credit: 1	Recommended Prerequisite: 1 credit from Health Science cluster	

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

Mathematics for Medical Professionals @ San Jacinto College		13020970
Grade: 12 Prerequisite: Geometry and Algebra II	Credit: 1	
guided by the college and career reading	nals course is designed to serve as the driving force behind the Texas essential knowledge and skills for maness standards. By embedding statistics, probability, and finance, while focusing on fluency and solid unders	tanding in

medical mathematics, students will extend and apply mathematical skills necessary for health science professions. Course content consists primarily of high school level mathematics concepts and their applications to health science professions.

#### Practicum in Health Science @ San Jacinto College

Grade: 12

Credit: 2

Prerequisite: Health Science Theory and Biology

The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills in Health science. Practicum experiences offer a variety of opportunities to pursue a career in the health care industry. Students are expected to apply the knowledge and skills necessary to pursue a health science certification or licensure through further education and employment and are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

13020500

13020600

## **Health Science**

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.



# Program of Study: Nursing Science (KNIT Program)

The Nursing Science program of study focuses on occupational and educational opportunities associated with patient care. This program of study includes the practice of caring for patients, performing routine procedures such as monitoring vital signs, developing, and implementing care plans, maintaining medical records, and managing disease or pain.

### Courses

9 <sup>th</sup> Grade	Principles of Health Science
10 <sup>th</sup> Grade	Medical Terminology Health Science Theory
11 <sup>th</sup> Grade	Anatomy and Physiology @ San Jacinto College Psychology @ San Jacinto College Humanities @ San Jacinto College
12 <sup>th</sup> Grade	Medical Microbiology @ San Jacinto College English IV @ San Jacinto College Human Growth and Development @ San Jacinto College

## Aligned Advanced Academic Course(s)

- AP Biology
- AP Chemistry

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	Volunteer at a community wellness center, hospital, assisted living center, or nursing home.	
Expanded Learning Opportunities	<ul> <li>Health Occupation Students of America (HOSA)</li> <li>Earn dual credit hours</li> </ul>	



## **Example Postsecondary Opportunities**

#### Apprenticeships

Registered Nurse Resident

## **Associate Degrees**

- Medical Assisting
- Vocational Nursing

#### **Bachelor's Degrees**

- Registered Nursing
- Nursing Administration

## Master's, Doctoral, and Professional Degrees

- Nursing Administration
- Nursing Science

## Additional Stackable IBCs/License

Certified Emergency Nurse

## **Example Aligned Occupations**

Nursing Assistants Median Wage: \$30,856 Annual Openings: 10,936 10-Year Growth: 15%

## Licensed Practical and Licensed

Vocational Nurses Median Wage: \$50,913 Annual Openings: 6,865 10-Year Growth: 17%

## Registered Nurses

Median Wage: \$79,831 Annual Openings: 16,207 10-Year Growth: 17%

Successful completed of this program of study will fulfill requirements of the Public Services endorsement or the STEM endorsement if the math and science requirements are met.

Approved Statewide Program of Study. C. E. King High School – 2024-25



Nursing Science (KNIT Program) Course Information

#### Level 1

#### **Principles of Health Science** 13020200 Grade: 9-10 Credit: 1 The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. 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. Level 2 **Medical Terminology** 13020300 Grade: 10-12 Credit: 1 The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology. Level 3 13020400 **Health Science Theory** Credit: 1 Grade: 10-12 Prerequisite: Biology

The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

Anatomy and Physiology @ San Jacinto College			13020600
Grade: 11-12	Credit: 1	GPA: 6.0	
Prerequisite: 1 credit in Biolog	y AND 1 credit in Chemistry, IPC, or Phys	sics	

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

#### Level 4

Medical Microbiology @ San Jacinto College

Credit: 1

Credit: 1

Grade: 11-12

Prerequisite: Biology and Chemistry

The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases

Human Growth and Development @ San Jacinto College	13014300

Grade: 10-12

Recommended Prerequisite: Principles of Education and Training

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



The Hospitality and Tourism career cluster focuses on the management, marketing, and operations of restaurants, lodging, attractions, recreation events, and travel-related services. This career cluster includes occupations ranging from reservation and transportation ticket agent to event planner and general manager.



# Program of Study: Culinary Arts (Dual Credit Courses)

Limited Seating

The Culinary Arts program of study focuses on occupational and educational opportunities associated with the planning, directing, or coordinating activities of a food and beverage organization or department. This program of study includes opportunities involved in directing and participating in the preparation of food.

#### Courses

9 <sup>th</sup> Grade	Introduction to Culinary Arts Principles of Hospitality and Tourism (Optional)
10 <sup>th</sup> Grade	Culinary Arts
11 <sup>th</sup> Grade	Advanced Culinary Arts (San Jacinto College Course)
12 <sup>th</sup> Grade	Practicum in Culinary Arts OR Career Preparation for Programs of Study

## Aligned Advanced Academic Course(s)

• AP Chemistry

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Plan a catering event or work for a catering company</li> <li>Work in a restaurant</li> <li>Work with King Catering</li> </ul>
Expanded Learning Opportunities	<ul> <li>Family, Career, and Community Leaders of America</li> <li>Earn dual credit hours</li> </ul>

## **Aligned Industry-Based Certifications**

ServSafe Manager



## Example Postsecondary Opportunities Associate Degrees

- Culinary Arts
- Baking and Pastry Arts

## **Bachelor's Degrees**

- Hotel/Motel Administration/Management
- Culinary Science

## Master's, Doctoral, and Professional Degrees

- Organizational LeadershipFoodservice Systems
- Administration/Management

## Additional Stackable IBCs/License

• Food Manager License

## **Example Aligned Occupations**

#### Bakers

Median Wage: \$29,466 Annual Openings: 2,942 10-Year Growth: 26%

#### **Chefs and Head Cooks**

Median Wage: \$44,761 Annual Openings: 950 10-Year Growth: 37%

## **General and Operations Managers**

Median Wage: \$83,220 Annual Openings: 25,450 10-Year Growth: 23%

Successful completed of this program of study will fulfill requirements of the Business and Industry Endorsement. Approved Statewide Program of Study. C. E. King High School – 2024-25



# **Culinary Arts Course Information**

Credit: 1

Credit: 2

## Level 1

#### Introduction to Culinary Arts

#### Grade: 9-10

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.

Principles of Hospitality and To	rism 13022200
Grade: 9-10	Credit: 1
Principles of Hospitality and Tour	n introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and

food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.

#### Level 2

## **Culinary Arts**

Grade: 10-12

Recommended Prerequisite: Introduction to Culinary Arts

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification or other appropriate industry certifications. This course is offered as a laboratory-based course.

#### Level 3

Advanced Culinary Arts (San Jac	into College Course)	13022650
Grade: 11-12 Prerequisite: Culinary Arts	Credit: 2	

Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards in order to prepare students for success in higher education, certifications, and/or immediate employment.

Industry Based Certification Offered: ServSafe Manager

#### Level 4

**Practicum in Culinary Arts** Grade: 12 Credit: 2

Prerequisite: Advanced Culinary Arts

Practicum in Culinary Arts 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.

13022700

## Human Services

The Human Services career cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs, such as counseling and mental health services, family and community services, personal care services, and consumer services. This career cluster includes occupations ranging from community health workers to cosmetologists and nutritionists.



# Program of Study: Cosmetology & Personal Care Services (Dual Credit Program)

Limited Seating

The Cosmetology and Personal Care Services regional program of study focuses on occupational and educational opportunities associated with providing beauty and personal care services. This program of study includes managing personal care facilities and coordinating or supervising personal service workers.

#### Courses

	Cosmetology Pathway	Barbering Pathway
9 <sup>th</sup> Grade	Principles of Cosmetology Design & Color Theory	Principles of Cosmetology Design & Color Theory
10 <sup>th</sup> Grade	Introduction to Cosmetology	Business Law
11 <sup>th</sup> Grade	Cosmetology I with Lab (San Jacinto College Course)	Barbering I @ San Jacinto College
12 <sup>th</sup> Grade	Cosmetology II with Lab (San Jacinto College Course)	Barbering II @ San Jacinto College

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Job shadow a cosmetologist</li><li>Work with Royality Salon</li></ul>
Expanded Learning Opportunities	<ul><li>SkillsUSA</li><li>Earn dual credit hours</li></ul>

## **Aligned Industry-Based Certifications**

Cosmetology Operator License



## Example Postsecondary Opportunities Apprenticeships

Apprentice Stylist

## **Associate Degrees**

- Cosmetology Operator
  - Esthetics and Skin Care

#### Additional Stackable IBCs/License

- Class A Barber
- Eyelash Extension Specialist
- Hair Weaving Specialist

## **Example Aligned Occupations**

## Hairdressers, Hairstylists, and Cosmetologists

Median Wage: \$27,286 Annual Openings: 8,014 10-Year Growth: 25%

#### **Skincare Specialists**

Median Wage: \$35,112 Annual Openings: 778 10-Year Growth: 38%

First-Line Supervisors of Personal Service Workers Median Wage: \$36,795

Annual Openings: 2,253 10-Year Growth: 29%

Successful completed of this program of study will fulfill requirements of the Public Service Endorsement. Approved Regional Program of Study. C. E. King High School – 2024-25



# Cosmetology & Personal Care Services Course Information

sales, negotiable instruments, agency and employment, business organization, risk management, and real property.

Credit: 1

#### Level 1

## Principles of Cosmetology Design & Color Theory

Grade: 9-10

In Principles of Cosmetology Design and Color Theory, students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Students will attain academic skills and knowledge as well as technical knowledge and skills related to cosmetology design and color theory. Students will develop knowledge and skills regarding various cosmetology design elements such as form, lines, texture, structure and illusion or depth as they relate to the art of cosmetology. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the TDLR requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.

#### Level 2

#### Introduction to Cosmetology

#### Grade: 10

Credit: 1

In Introduction to Cosmetology, students explore careers in the cosmetology industry. To prepare for success, students must have academic and technical knowledge and skills relative to the industry. Students may begin to earn hours toward state licensing requirements.

# Business Law 13011700 Grade: 10-12 Credit: 1 Business Law is designed for students to analyze various aspects of the legal environment, including ethics, the judicial system, contracts, personal property,

#### Level 3

# Cosmetology I with Lab 13025210 Grade: 11-12 Credit: 3

Prerequisite: Introduction to Cosmetology

In Cosmetology I, students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation (TDLR) requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.

Barbering I @ San Jacinto	College	N1302534
Grade: 11-12	Credit: 3	

In Barbering I, students coordinate integration of academic, career, and technical knowledge and skills in a laboratory instructional sequence of courses designed to provide job-specific training for employment in barbering careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation (TDLR) requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.

#### Level 4

# Cosmetology II with Lab 13025310 Grade: 12 Credit: 3 Prerequisite: Cosmetology I Image: Cosmetology I

In Cosmetology II, students will demonstrate proficiency in academic, technical, and practical knowledge and skills. The content is designed to provide the occupational skills required for licensure. Instruction includes advanced training in professional standards/employability skills; Texas Department of Licensing and Regulation (TDLR) rules and regulations; use of tools, equipment, technologies and materials; and practical skills.

Industry Based Certification: Cosmetology Operator License

Barbering II @ San Jacinto College		N1302535
Grade: 12	Credit: 3	

In Barbering II, students will demonstrate proficiency in academic, technical, and practical knowledge and skills. The content is designed to provide the occupational skills required for licensure. Instruction includes advanced training in professional standards/employability skills; Texas Department of Licensing and Regulation (TDLR) rules and regulations; use of tools, equipment, technologies and materials; and practical skills.

#### 13025050

## **Human Services**

The Human Services career cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs, such as counseling and mental health services, family and community services, personal care services, and consumer services. This career cluster includes occupations ranging from community health workers to cosmetologists and nutritionists.



# Program of Study: Family & Community Services

The Family and Community Services program of study focuses on occupational and educational opportunities associated with social services, including child and human development and consumer sciences. This program of study includes managing social and community services, managing family and consumer sciences, and understanding career paths in social work or therapy for children, families, or school communities.

#### Courses

9 <sup>th</sup> Grade	Principles of Human Services Professional Communications Interpersonal Studies
10 <sup>th</sup> Grade	Lifetime Nutrition and Wellness Dollars and Sense Human Growth and Development Child Development
11 <sup>th</sup> Grade	Counseling and Mental Health
12 <sup>th</sup> Grade	Practicum in Human Services OR Career Preparation for Programs of Study

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Volunteer at a community center; intern for community non-profit organization</li> </ul>	
Expanded Learning Opportunities	Family, Career, Community Leaders of Americ (FCCLA)	

## **Aligned Industry-Based Certifications**

Community Health Worker



## Example Postsecondary Opportunities Apprenticeships

• Community Health Worker Apprentice

#### **Associate Degrees**

- Social Work
- Human Development and Family Studies

#### **Bachelor's Degrees**

- Social Work
- Human Development and Family Studies

## Master's, Doctoral, and Professional Degrees

- Mental Health Counseling
- Marriage and Family Therapy
- Additional Stackable IBCs/License
- Certified Diabetes Educator

## **Example Aligned Occupations**

Community Health Workers Median Wage: \$39,520 Annual Openings: 501 10-Year Growth: 25%

Social and Human Service Assistants Median Wage: \$38,442 Annual Openings: 3,298 10-Year Growth: 21%

Child, Family, and School Social Workers Median Wage: \$49,398 Annual Openings: 2,342 10-Year Growth: 14%

Successful completed of this program of study will fulfill requirements of the Public Service Endorsement. Approved Statewide Program of Study. C. E. King High School – 2024-25

# Family and Community Services **Course Information**

Credit: 1

## Level 1

## **Principles of Human Services**

#### Grade: 9-10

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

Professional Communications		13009900
Grade: 9-12	Credit: 0.5	
Professional Communications blends writte	n, oral, and graphic communication in a career-based environment. Careers in the global economy require	individuals

to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

#### Grade: 9-12 Credit: 0.5 Recommended Prerequisite: Principles of Human Services, Principles of Health Science, OR Principles of Education and Training

Interpersonal Studies examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

## **Dollars and Sense**

**Interpersonal Studies** 

Grade: 10-12 Credit: 0.5 Recommended Prerequisite: Principles of Human Services

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

#### Level 2

Lifetime Nutrition and Wellness

Grade: 9-12

Recommended Prerequisite: Principles of Human Services

Lifetime Nutrition and Wellness is a laboratory course that allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences.

#### **Child Development**

Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Education and Training OR Principles of Human Services

Credit: 0.5

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

**Human Growth and Development** 

Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Education and Training OR Principles of Human Services

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

# 13024400

13024200

13024500

13024700

13014300

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# Family and Community Services Course Information

Credit: 1

#### Level 3

#### **Counseling and Mental Health**

#### Grade: 11-12

Recommended Prerequisite: Principles of Human Services

In Counseling and Mental Health, students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities.

#### Level 4

#### **Practicum in Human Services**

13025000

13024600

Grade: 12 Credit: 2 Prerequisite: 1 credit in Human Services OR 1 credit in Education & Training

Practicum in Human Services provides background knowledge and occupation-specific training that focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community-services careers. Content for Practicum in Human Services is designed to meet. the occupational preparation needs and interests of students and should be based upon the knowledge and skills selected from two or more courses in a coherent sequence in the human services cluster.

Industry Based Certification: Community Health Workers



The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts.



# Program of Study: Cybersecurity

The Cybersecurity program of study focuses on occupational and educational opportunities associated with planning, implementing, upgrading, or monitoring security measures for the protection of computer networks and information. This program of study includes responding to computer security breaches and viruses and administering network security measures.

## Courses

9 <sup>th</sup> Grade	Fundamentals of Computer Science
10 <sup>th</sup> Grade	AP Computer Science Principles
11 <sup>th</sup> Grade	Networking
12 <sup>th</sup> Grade	Practicum in STEM - Cybersecurity

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Work on industry projects</li></ul>	
Expanded Learning Opportunities	Texas Technology Students Association (TSA)	

## Aligned Industry-Based Certifications

CompTIA Network+



## Example Postsecondary Opportunities Associate Degrees

Computer and Information Systems Security

## Computer Programming

## **Bachelor's Degrees**

- Computer Science
- Computer Software Engineering

## Master's, Doctoral, and Professional Degrees

 Computer and Information Systems Security/Auditing/Information Assurance

## Computer Software Engineering

- Additional Stackable IBCs/License
- Certified Ethical Hacker (CEH)

## **Example Aligned Occupations**

Computer User Support Specialists Median Wage: \$51,411 Annual Openings: 5,757 10-Year Growth: 21%

## Software Developers

Median Wage: \$111,705 Annual Openings: 15,324 10-Year Growth: 36%

Information Security Analysts Median Wage: \$110,268 Annual Openings: 1,719 10-Year Growth: 49%

Successful completed of this program of study will fulfill requirements of the STEM Endorsement if the math and science requirements are met or the Business & Industry endorsement.

Approved Statewide Program of Study. C. E. King High School – 2024-25



#### Level 1

#### **Fundamentals of Computer Science**

#### Grade: 9-10

13027400

13037400

# 9-10 Credit: 1

Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations and concepts.

#### Level 2

AP Computer Science Principles			A3580300
Grade: 9-12 Recommended Prerequisite: Algebra I	Credit: 1 Advanced Placement Test offered	GPA: 6.0	

Computer science is everywhere, from smartphones and video games to music, medicine, and much more. AP Computer Science Principles (AP CSP) can help students understand how computing and technology influence the world around them. Learn how to creatively address real-world issues while using the same tools and processes that artists, writers, computer scientists, and engineers use to bring ideas to life. If you have big ideas and an interest in using technology and creativity to realize those ideas and solve problems, computer science is for you. AP Computer Science Principles can lead to 49 college majors and 130 career areas.

AP Computer Science Principles explores the fundamentals of computing, including problem solving, working with data, understanding the internet, cybersecurity and programming. It will broaden students' understanding of computer science for use in a diversity of majors and careers.

Students must have knowledge of basic algebra, experience in problem solving and competence with written communication.

#### Level 3

#### Networking

Grade: 10-12

Credit: 1

Credit: 2

In Networking, students will develop knowledge of the concepts and skills related to data networking technologies and practices in order to apply them to personal or career development. To prepare for success, students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Industry Based Certification: CompTIA Network+

#### Level 4

#### Practicum in Science, Technology, Engineering, and Math - Cybersecurity

Grade: 12

Prerequisite: Algebra I and Geometry; two IT Career Cluster Courses

This practicum in Science, Technology, Engineering, and Mathematics is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Although periods should be adhered to in order to provide students with experience, completion of skill sets may be demonstrated throughout the practicum; thus, units do not have to be delivered.

Industry Based Certification: CompTIA Security+



## **Information Technology**

The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts.



# Program of Study: Programming & Software Development (Dual Credit Option)

The Programming and Software Development program of study focuses on occupational and educational opportunities associated with researching, designing, developing, testing, and operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study includes creating, modifying, and testing the codes, forms, and script that allow computer applications to run.

## Courses

	Dual Credit Pathway	KHS Pathway
9 <sup>th</sup> Grade	Fundamentals of Computer Science Game Programming and Design	Fundamentals of Computer Science
10 <sup>th</sup> Grade	AP Computer Science Principles	Game Programming and Design
11 <sup>th</sup> Grade	Computer Science I (San Jacinto College Course) Computer Science II (San Jacinto College Course)	Mobile App Development
12 <sup>th</sup> Grade	Practicum in STEM - Programming	Practicum in STEM - Programming

## Aligned Advanced Academic Course(s)

- AP Calculus
- AP Statistics

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Work on industry projects</li></ul>	
Expanded Learning Opportunities	Texas Technology Students Association (TS	

## **Aligned Industry-Based Certifications**

- Certified User: Programmer
- Oracle Certified Associate Java SE 8 Programmer



#### Example Postsecondary Opportunities Apprenticeships

Computer Programmer Apprenticeship

## **Associate Degrees**

- Computer Programming
- Web Page, Digital/Multimedia and Information Resources Design

#### **Bachelor's Degrees**

- Data Science
- Computer Engineering

## Master's, Doctoral, and Professional Degrees

- Management Science
- Computer Software Engineering

## Additional Stackable IBCs/License

AWS Certified Developer Associate

## **Example Aligned Occupations**

#### Computer User Support Specialists Median Wage: \$51,411 Annual Openings: 5,757 10-Year Growth: 21%

## Software Developers

Median Wage: \$111,705 Annual Openings: 15,324 10-Year Growth: 36%

#### **Computer Programmers** Median Wage: \$87,997 Annual Openings: 1,176 10-Year Growth: 4%

Successful completed of this program of study will fulfill requirements of the STEM Endorsement if the math and science requirements are met or the Business & Industry endorsement.

Approved Statewide Program of Study. C. E. King High School – 2024-25



# Programming and Software Development Course Information

Credit: 1

#### Level 1

#### **Fundamentals of Computer Science**

#### Grade: 9-10

03580140

03580200

Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations and concepts.

#### Level 2

AP Computer Science Principles			A3580300
Grade: 9-12 Recommended Prerequisite: Algebra I	Credit: 1 Advanced Placement Test offered	GPA: 6.0	

Computer science is everywhere, from smartphones and video games to music, medicine, and much more. AP Computer Science Principles (AP CSP) can help students understand how computing and technology influence the world around them. Learn how to creatively address real-world issues while using the same tools and processes that artists, writers, computer scientists, and engineers use to bring ideas to life. If you have big ideas and an interest in using technology and creativity to realize those ideas and solve problems, computer science is for you. AP Computer Science Principles can lead to 49 college majors and 130 career areas.

AP Computer Science Principles explores the fundamentals of computing, including problem solving, working with data, understanding the internet, cybersecurity and programming. It will broaden students' understanding of computer science for use in a diversity of majors and careers.

Students must have knowledge of basic algebra, experience in problem solving and competence with written communication.

Credit: 1

#### Computer Science I (San Jacinto College Course)

Grade: 11-12 Prerequisite: Algebra I

Computer Science I will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations, systems, and concepts.

# Game Programming and Design 03580380 Grade: 9-12 Credit: 1

Prereguisite: Algebra I

Game Programming and Design will foster student creativity and innovation by presenting students with opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve gaming problems. Through data analysis, students will include the identification of task requirements, plan search strategies, and use programming concepts to access, analyze, and evaluate information needed to design games. By acquiring programming knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect.



# Programming and Software Development Course Information

Level 3

#### Computer Science II (San Jacinto College Course)

Grade: 11-12

Prerequisite: Algebra I and Fundamentals of Computer Science or Computer Science I

Credit: 1

Computer Science II will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of computer science through the study of technology operations, systems, and concepts.

Mobile App Development

Grade: 11-12 Prerequisite: Algebra I Credit: 1

Mobile Application Development will foster students' creativity and innovation by presenting opportunities to design, implement, and deliver meaningful projects using mobile computing devices. Students will collaborate with one another, their instructor, and various electronic communities to solve problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use software development concepts to access, analyze, and evaluate information needed to program mobile devices. By using software design knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of mobile application development through the study of development platforms, programming languages, and software design standards.

#### Level 4

Practicum in Science, Technology, Engineering, and Math - Programming

Grade: 12

Credit: 2

Prerequisite: Algebra I and Geometry; two IT Career Cluster Courses

This practicum in Science, Technology, Engineering, and Mathematics is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Although periods should be adhered to in order to provide students with experience, completion of skill sets may be demonstrated throughout the practicum; thus, units do not have to be delivered.

Industry Based Certification: Certified User: Programmer and/or Oracle Certified Associate Java SE 8 Programmer

03580300

03580390



# Law and Public Service

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. This career cluster includes occupations ranging from police officer and firefighter to political scientist and lawyer.



# Program of Study: Law Enforcement (Dual Credit Program)

The Law Enforcement program of study focuses on occupational and educational opportunities associated with the development and enforcement of laws by various branches of law enforcement. This program of study includes the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

#### Courses

9 <sup>th</sup> Grade	Principles of Law, Public Safety, Corrections, and Security	
10 <sup>th</sup> Grade	Law Enforcement I Business Law (Optional)	Example F
11 <sup>th</sup> Grade	Counseling and Mental Health Court Systems and Practices (San Jacinto College Course) Correctional Services (San Jacinto College Course) Federal Law Enforcement and Protective Services (San Jacinto College Course)	Apprentices <ul> <li>Security</li> </ul> Associate D <ul> <li>Criminal</li> <li>Law Enformation</li> </ul>
12 <sup>th</sup> Grade	Forensic Science Criminal Investigations (San Jacinto College Course) Law Enforcement II (San Jacinto College Course)	<ul> <li>Bachelor's I</li> <li>Forensic</li> <li>Criminal</li> </ul>

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	Attend court hearings and other legal procedures
Expanded Learning Opportunities	<ul><li>Criminal Justice Club</li><li>Earn dual credit hours</li></ul>

## **Aligned Industry-Based Certifications**

- Non-Commissioned Security Officer Level II
- International Academy of Emergency Dispatch Emergency Telecommunicator



# Postsecondary Opportunities ships

Specialist

## )egrees

- Justice
- forcement

## Degrees

- c Science
- I Justice

## Master's, Doctoral, and Professional Degrees

- **Criminal Justice** •
- Criminology and Criminal Justice •

## Additional Stackable IBCs/License

- Jailer Basic County Corrections
- **Basic Telecommunicator**

## **Example Aligned Occupations**

## Police and Sheriff's Patrol Officers

Median Wage: \$64,373 Annual Openings: 5,424 10-Year Growth: 13%

## **Detectives and Criminal Investigators** Median Wage: \$82,090 Annual Openings: 1,536

10-Year Growth: 8%

#### **First-Line Supervisors of Police and** Detectives Median Wage: \$97,571

Annual Openings: 5,461 10-Year Growth: 12%

Successful completed of this program of study will fulfill requirements of the Public Service Endorsement. Approved Statewide Program of Study. C. E. King High School - 2024-25

# Law Enforcement **Course Information**

#### Level 1

#### Principles of Law, Public Safety, Corrections, and Security

#### Grade: 9-10

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.

#### Level 2

#### Law Enforcement I

Grade: 10-12

Grade: 11-12

Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security

Credit: 1

Credit: 1

Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

Federal Law Enforcement	and Ducto stires Completes	(Con Instate College Course)
Federal Law Enforcement	and Protective Services	(San Jacinto College Course)

Credit: 1

Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security

Federal Law Enforcement and Protective Services provides the knowledge and skills necessary to prepare for certification in security services for federal law enforcement and protective services. The course provides an overview of security elements and types of organizations with a focus on security measures used to protect lives, property, and proprietary information, to ensure computer security, to provide information assurance, and to prevent cybercrime.

#### Criminal Investigations (San Jacinto College Course)

Grade: 11-12

Credit: 1 Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security

Criminal Investigation is a course that introduces students to the profession of criminal investigations. Students will understand basic functions of criminal investigations and procedures and will learn how to investigate or follow up during investigations. Students will learn terminology and investigative procedures related to criminal investigation, crime scene processing, evidence collection, fingerprinting, and courtroom presentation. Through case studies and simulated crime scenes, students will collect and analyze evidence such as fingerprint analysis, bodily fluids, hairs, fibers, shoe and tire impressions, bite marks, drugs, tool marks, firearms and ammunition, blood spatter, digital evidence, and other types of evidence.

#### Court Systems and Practices (San Jacinto College Course)

Grade: 11-12

Credit: 1 Recommended Prerequisite: Law Enforcement I

Court Systems and Practices is an overview of the federal and state court systems. The course identifies the roles of judicial officers and the trial processes from pretrial to sentencing and examines the types and rules of evidence. Emphasis is placed on constitutional laws for criminal procedures such as search and seizure, stop and frisk, and interrogation.

## **Business Law (Optional)**

Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Principles of Business, Marketing, and Finance

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



13029200

13029300

13029550

13029800

13029600



## Level 3

#### **Counseling and Mental Health**

#### Grade: 11-12

Recommended Prerequisite: Principles of Human Services

In Counseling and Mental Health, students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities.

Correctional Services (	San Jacinto Colle	ne Course)
Correctional Services	Sall Jacinto Colle	ye course)

Grade: 11-12

Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security

Credit: 1

Credit: 1

In Correctional Services, students prepare for certification required for employment as a municipal, county, state, or federal correctional officer. Students will learn the role and responsibilities of a county or municipal correctional officer; discuss relevant rules, regulations, and laws of municipal, county, state, or federal facilities; and discuss defensive tactics, restraint techniques, and first aid procedures as used in the municipal, county, state, or federal correctional setting. Students will analyze rehabilitation and alternatives to institutionalization for inmates.

Law Enforcement II (San Jacinto College Course)		13029400
Grade: 10-12	Credit: 1	
Prerequisite: Law Enforceme	ent I	
Law Enforcement II provides	the knowledge and skills necessary to prep	pare for a career in law enforcement. Students will understand ethical and legal

responsibilities, patrol procedures, first responder roles, telecommunications, emergency equipment operations, and courtroom testimony.

Industry Based Certification: Non-Commissioned Security Officer Level II

#### Level 4

Forensic Science (Satisfies a science credit)			13029500
Grade: 11-12 Prerequisite: Biology AND Chem	Credit: 1 histry, IPC, or Physics	GPA: 4.0	

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 crimes scenes such as fingerprinting analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.



## Law and Public Service

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. This career cluster includes occupations ranging from police officer and firefighter to political scientist and lawyer.



# Program of Study: Legal Studies (Dual Credit Courses)

The Legal Studies program of study focuses on topics such as legal research, legal writing, rules of procedure, case management, law office technology, and legal ethics. Areas of the legal system studied include aspects of family law, criminal law, and contract law.

#### Courses

9 <sup>th</sup> Grade	Principles of Law, Public Safety, Corrections, and Security
10 <sup>th</sup>	Business Law
Grade	Law Enforcement I (Optional)
11 <sup>th</sup> Grade	Court Systems and Practices Legal and Research Writing (San Jacinto College Course) Advanced Legal Skills & Professions (San Jacinto College Course)
12 <sup>th</sup> Grade	Forensic Science Practicum in Law, Public Safety, Corrections, and Security OR Career Preparation for Programs of Study

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Attend court hearings and other legal procedures</li> <li>Participate in a mock trial program</li> </ul>
Expanded Learning Opportunities	<ul><li>Criminal Justice Club</li><li>Earn dual credit hours</li></ul>



## Example Postsecondary Opportunities Apprenticeships

Law Apprenticeship

## **Associate Degrees**

- Paralegal Studies
- Court Reporting and Captioning

#### Bachelor's Degrees

- Legal Research
- Legal Studies

## Master's, Doctoral, and Professional Degrees

- Juris Doctorate
- International and Comparative Law

## Additional Stackable IBCs/License

Paralegal

## **Example Aligned Occupations**

#### **Court Reporters**

Median Wage: \$51,177 Annual Openings: 174 10-Year Growth: 11%

#### Paralegals and Legal Assistants

Median Wage: \$56,310 Annual Openings: 4,046 10-Year Growth: 23%

#### Lawyers

Median Wage: \$134,158 Annual Openings: 3,915 10-Year Growth: 19%

Successful completed of this program of study will fulfill requirements of the Public Service Endorsement. Approved Statewide Program of Study. C. E. King High School – 2024-25

# **Legal Studies Course Information**

## Level 1

#### Principles of Law, Public Safety, Corrections, and Security

#### Grade: 9-10

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.

#### Level 2

#### **Business Law**

Grade: 10-12

Recommended Prerequisite: Principles of Principles of Business, Marketing, and Finance

Credit: 1

Credit: 1

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

#### **Court Systems and Practices**

#### Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Principles of Law, Public Safety, Corrections, and Security

Court Systems and Practices is an overview of the federal and state court systems. The course identifies the roles of judicial officers and the trial processes from pretrial to sentencing and examines the types and rules of evidence. Emphasis is placed on constitutional laws for criminal procedures such as search and seizure, stop and frisk, and interrogation.

#### Law Enforcement I (Optional)

#### Grade: 10-12

Credit: 1 Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security

Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

## Level 3

Legal and Research Writing (San Jacinto	College Course)	N1303014
Grade: 11-12	Credit: 1	

Legal Research and Writing provides an introduction to the study and practice of legal writing and research. This course is designed to introduce students to the methods and tools used to conduct legal research, develop and frame legal arguments, produce legal writings such as briefs, memorandums, and other legal documents, study U.S. Constitutional law, and prepare for appellate argument(s).

#### Advanced Legal Skills and Professions (San Jacinto College Course) Grade: 11-12 Credit: 1

Advanced Legal Skills and Professions provides students with a foundation to understand the basic mechanics of the U.S. legal system. Building on prior instruction in constitutional issues and the basics of American court systems, this course provides insight into the practical application of the law, as well as civil and criminal procedure, giving students a hands-on opportunity to experience a variety of legal professions.

#### 13029200

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N1303016



Level 4

# Course Information

**Legal Studies** 

Forensic Science (Satisfies	s a science credit)		13029500
Grade: 11-12	Credit: 1	GPA: 4.0	
Prerequisite: Biology AND C	hemistry, IPC, or Physics		

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 crimes scenes such as fingerprinting analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

Practicum in Law, Public Safety, Corrections, and Security		13030100
Grade: 12	Credit: 2	

Prerequisite: 1 credit in a Law and Public Service course

The practicum course is designed to give students supervised practical application of previously studied knowledge and skills in law, public safety, corrections, and security. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

## Manufacturing

The Manufacturing career cluster focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and process engineering. This career cluster includes occupations ranging from welder and machinist to industrial engineering technician and semi-conductor processing technician.



# Program of Study: Welding (Dual Credit Program)

Limited Seating

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. CTE learners 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.

#### Courses

9 <sup>th</sup> Grade	Introduction to Welding
10 <sup>th</sup> Grade	Welding I
11 <sup>th</sup> Grade	Welding II (San Jacinto College Course)
12 <sup>th</sup> Grade	Practicum in Manufacturing @ San Jacinto College

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul><li>Earn industry certification</li><li>Join the American Welding Society</li></ul>
Expanded Learning Opportunities	<ul><li>SkillsUSA</li><li>Earn dual credit hours</li></ul>

## **Aligned Industry-Based Certifications**

AWS D1.1 Structural Steel



Example Postsecondary Opportunities Apprenticeships

Welding

## **Associate Degrees**

- Welding Technology
- Building/Construction Site Management
- Operations Management and Supervision

## **Bachelor's Degrees**

- Welding Technology
- Construction Management
- Project Management
- Building/Construction Site Management

## Master's, Doctoral, and Professional Degrees

- Engineering
- Engineering/Industrial Management
- Manufacturing Engineering
- Construction Engineering

## **Example Aligned Occupations**

#### Welders, Cutters, Solderers, and Brazers Median Wage: \$48,177 Annual Openings: 6,792

10-Year Growth: 23%

#### First-Line Supervisors of Production and Operating Workers Median Wage: \$62,584 Annual Openings: 5,926

10-Year Growth: 17%

## Industrial Production Managers

Median Wage: \$119,691 Annual Openings: 1,296 10-Year Growth: 19%

Successful completed of this program of study will fulfill requirements of the Business and Industry Endorsement. Approved Statewide Program of Study. C. E. King High School – 2024-25

# Welding Course Information

Credit: 1

## Level 1

## Introduction to Welding

#### Grade: 9-12

Recommended Prerequisite: Algebra 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.

#### Level 2

Welding I

Grade: 10-12 Credit: 2 Recommended Prerequisite: Introduction to Welding

Welding I provides the knowledge, skills, and technologies required for employment in metal technology systems. Students will develop knowledge and skills related to this system 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 prepare students for future success.

## Level 3

Welding II		13032400
Grade: 11-12 Prerequisite: Welding I	Credit: 2	
Welding II builds on the knowledg	and skills developed in Welding L Students w	ill develop advanced welding concepts and skills as related to personal and

Welding II builds on the knowledge and skills developed in Welding I. Students will develop advanced welding concepts and skills as related to personal and career development. Students will integrate academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Industry Based Certifications: AWS D1.1 Structural Steel

## Level 4

Practicum in Manufacturing @ San J	acinto College	13033000
Grade: 12 Prerequisite: Welding II	Credit: 2	

The Practicum in Manufacturing course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.



## **Transportation, Distribution & Logistics**

The Transportation, Distribution, and Logistics career cluster focuses on planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes transportation infrastructure planning and management, logistics services, and mobile equipment and facility maintenance. This career cluster includes occupations ranging from automotive mechanic, avionics technician, and automotive entrepreneur to pilots and logistics planning professionals.



# Program of Study: Automotive & Collision Repair

Limited Seating

The Automotive and Collision Repair program of study focuses on the occupational and educational opportunities associated with servicing, repairing, and refinishing various types of vehicles. This program of study includes diagnosing and servicing vehicles and learning about processes, technologies, and materials used in reconstructing vehicles.

#### Courses

9 <sup>th</sup> Grade	Principles of Transportation Systems
10 <sup>th</sup> Grade	Automotive Basics
11 <sup>th</sup> Grade	Automotive Technology I: Maintenance and Light Repair
12 <sup>th</sup> Grade	Automotive Technology II: Automotive Service OR Career Preparation for Programs of Study

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Earn industry certification</li> <li>Work at a local automotive repair or body shop</li> <li>Work with Panther Pride Automotive Technology</li> </ul>
Expanded Learning Opportunities	SkillsUSA

## **Aligned Industry-Based Certifications**

• ASE Entry Level Automobile Maintenance and Light Repair (MR)



# Example Postsecondary Opportunities Apprenticeships

Automotive Technician Apprenticeship

## **Associate Degrees**

- Automobile/Automotive Mechanics
   Technology
- Autobody/Collision and Repair Technology Bachelor's Degrees
- Autobody/Collision and Repair Technology
- Heavy Equipment Maintenance Technology

## Additional Stackable IBCs/License

 Automobile and Light Truck Certification (A1 – A9)

## **Example Aligned Occupations**

Automotive Service Technicians and Mechanics Median Wage: \$44,809 Annual Openings: 6,285 10-Year Growth: 10%

Bus and Truck Mechanics and Diesel Engine Specialists Median Wage: \$50,967 Annual Openings: 3,096 10-Year Growth: 19%

First-Line Supervisors of Mechanics, Installers, and Repairers Median Wage: \$66,535 Annual Openings: 5,019 10-Year Growth: 19%

Successful completed of this program of study will fulfill requirements of the Business and Industry Endorsement. Approved Statewide Program of Study. C. E. King High School – 2024-25



# Automotive & Collision Repair Course Information

#### **Principles of Transportation Systems**

#### Grade: 9-12

Credit: 1

In Principles of Transportation Systems, students will gain knowledge and skills in the safe application, design, production, and assessment of products, services, and systems. This knowledge includes the history, laws and regulations, and common practices used in the transportation industry. Students should apply knowledge and skills in the application, design, and production of technology as it relates to the transportation industries. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings.

#### Level 2

#### **Automotive Basics**

Grade: 10-12

Credit: 1

Credit: 2

Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

#### Level 3

## Automotive Technology I: Maintenance and Light Repair

**Grade: 10-12** *Prerequisite: Automotive Basics* 

Automotive Technology I: Maintenance and Light Repair includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. This course includes applicable safety and environmental rules and regulations. In Automotive Technology I: Maintenance and Light Repair, students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

#### Level 4

#### Automotive Technology II: Automotive Service

Grade: 11-12

Credit: 2

Prerequisite: Automotive Technology I: Maintenance and Light Repair

Automotive Technology II: Automotive Service includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. Automotive Technology II: Automotive Service includes applicable safety and environmental rules and regulations. In this course, students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Industry Based Certification: ASE Entry Level Automobile Maintenance and Light Repair (MR)

#### 13039250

13039550

13039600



## **Transportation, Distribution & Logistics**

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.



# Program of Study: Diesel, Heavy Equipment Maintenance, and Commercial Drivers (Dual Credit Program)

The Diesel, Heavy Equipment Maintenance, and Commercial Drivers program of study focuses on occupational and educational opportunities associated with the function, operations, diagnosis, and service of diesel and heavy equipment systems. This program of study includes driving, inspecting, diagnosing, and repairing off-highway and on-highway vehicles and equipment.

#### Courses

9 <sup>th</sup> Grade	Principles of Transportation Systems
10 <sup>th</sup> Grade	Automotive Basics
11 <sup>th</sup> Grade	Diesel Equipment Technology I @ San Jacinto College
12 <sup>th</sup> Grade	Diesel Equipment Technology II @ San Jacinto College

## Work-Based Learning/Expanded Learning Opportunities

Work-Based Learning Activities	<ul> <li>Shadow a diesel mechanic at a transportation company and learn to inspect and repair diesel equipment</li> <li>Intern at a transportation company, working closely with an industrial mechanic to diagnose issues with heavy equipment</li> </ul>
Expanded Learning Opportunities	SkillsUSA

## Example Postsecondary Opportunities Apprenticeships

Diesel Mechanic Apprentice

## **Associate Degrees**

- Diesel Mechanics Technology
- Medium/Heavy Vehicle and Truck Technology

## **Bachelor's Degrees**

- Electrical and Power Transmission Technology
- Construction/Heavy Equipment/Earthmoving Equipment Operation

## Additional Stackable IBCs/License

 Electronic Diesel Engine Diagnosis Specialist Certification (L2)

## **Example Aligned Occupations**

Heavy and Tractor-Trailer Truck Drivers Median Wage: \$46,825 Annual Openings: 29,081 10-Year Growth: 22%

#### Mobile Heavy Equipment Mechanics Median Wage: \$57,943 Annual Openings: 2,637 10-Year Growth: 31%

#### First-Line Supervisors of Mechanics, Installers, and Repairers Median Wage: \$66,535 Annual Openings: 5,019 10-Year Growth: 19%

Successful completed of this program of study will fulfill requirements of the Business and Industry Endorsement. Approved Statewide Program of Study. C. E. King High School – 2024-25



# **Diesel, Heavy Equipment Maintenance, and Commercial Drivers Course Information**

## Level 1

#### **Principles of Transportation Systems** 13039250 Grade: 9-12 Credit: 1 In Principles of Transportation Systems, students will gain knowledge and skills in the safe application, design, production, and assessment of products, services, and systems. This knowledge includes the history, laws and regulations, and common practices used in the transportation industry. Students should apply

knowledge and skills in the application, design, and production of technology as it relates to the transportation industries. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings.

#### Level 2

#### **Automotive Basics** 13039550 Grade: 10-12 Credit: 1

Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Diesel Equipment Technology I @ San Jacinto College		13040150
Grade: 11-12	Credit: 2	

Prerequisite: Principles of Transportation Systems and meet the San Jacinto College entrance requirements

Diesel Equipment Technology I includes knowledge of the function and maintenance of diesel systems. Rapid advances in diesel technology have created new career opportunities and demands in the transportation industry. This course provides the knowledge, skills, and technologies required for employment in transportation systems.

#### Level 3

Diesel Equipment Technology II @ San Jacinto College		13040160
Grade: 11-12	Credit: 2	

Prerequisite: Diesel Equipment Technology I and meet the San Jacinto College entrance requirements

Diesel Equipment Technology II includes knowledge of the function, diagnosis, and service of diesel equipment systems. Rapid advances in diesel technology have created new career opportunities and demands in the transportation industry. This course provides the advanced knowledge, skills, and technologies required for employment in transportation systems.

# **English Language Arts**

Foundation/Required for All Endorsements	Advanced Academics
English I	Pre-AP English I
English II	Pre-AP English II
English III Language and Composition	AP English III Language and Composition
	AP English IV Literature and Composition or
English IV Literature and Composition or	College Preparatory Course ELA or
College Preparatory Course ELA	OnRamps Dual Credit English IV or
	English IV Dual Credit

\* In order to earn an Arts and Humanities Endorsement, students must take four English elective courses in addition to English I, English II, and English III Language and Composition (see page 8).

\*\* In order to earn a Business and Industry Endorsement, students must take four Journalism elective courses (see page 10).

College Preparatory Course English Language Arts			CP110100
Grade: 10-12 Prerequisite: English I	Credit: 0.5 – 1	GPA: 4.0	

Students will learn to investigate academic texts, construct supported interpretations and arguments for an authentic audience, and acquire academic habits of thought. Reading instruction will focus on developing critical reading skills for comprehension, interpretation, and analysis. In writing, students will develop skills through composing with specific purpose, situation, genre, and audience in mind. Students will write a variety of effective formal and informal text. To learn to integrate reading and writing, students will use an inquiry approach to analyze, synthesize, and make value judgments regarding text and writing. This course is designed to prepare students for college-level reading and writing intensive courses. Successful completion of this course, as defined by the memorandum of understanding (MOU) with the partnering institution(s), grants the student an exemption to TSI requirements for reading and writing at the partnering institution(s).

Communications Applications Dual Credit (San Jacinto College)			03241400
Grade: 11	Credit: 0.5	GPA: 6.0	

This introductory class in Public Speaking offers training in principles of Speech Communication and delivery as well as an introduction to various types of speaking situations.

Creative Writing		03221200	
Grade: 11-12	Credit: 0.5 – 1		
composition course, asks hig are expected to demonstrate written English. The students	gh school students to demonstrate their ski an understanding of the recursive nature of s' evaluation of their own writing as well as	alf to one credit while developing versatility as a writer. Creative Writing, a rigorous ill in such forms of writing as fictional writing, short stories, poetry, and drama. All students of the writing process, effectively applying the conventions of usage and the mechanics of the writing of others ensures that students completing this course are able to analyze and self-assessments for effective writing, and set their own goals as writers.	
English I		03220100	
Grade: 9	Credit: 1	GPA: 4.0	
English I is a study in composition, literature and grammar. Students will complete essays as they analyze and respond to the literature studied. Students will complete independent reading of classical and multicultural works to strengthen their comprehension. Grammar, writing mechanics, and research techniques will be addressed through direct instruction.			

Pre-AP English I			03220100
Grade: 9	Credit: 1	GPA: 5.0	

Pre-Advanced Placement English I is a course designed to prepare students for participation in Advanced Placement (AP) English. Students will experience a greater depth of study of the English language. Emphasis is placed on a high level of written work demonstrating in-depth literary analysis through completion of essays and commentaries. Students will strengthen language comprehension and vocabulary skill through readings in prose, poetry and drama. Library research and oral presentation skills are also major components.

English II			03220200
Grade: 10	Credit: 1	GPA: 4.0	

English II involves an intensive study of multi-paragraph papers in descriptive, narrative, classificatory, and evaluative modes; traditional and integrated grammar, vocabulary, mechanics; oral communication skills; introduction to research skills; and literature.

# Pre-AP English II Grade: 10 Prerequisite: English I or Pre-AP English I; approved application and signed contract

Pre-AP English II is a survey course of classical works tracing the development of the hero/heroine in literature. Included with the study of these classics is a review of grammatical skills and usage, an in-depth study of writing skills, a research paper, and a study of vocabulary words and roots. The academic rigor of this course and the vertical alignment of all Pre-AP courses help to prepare students for the AP exams given in grades 11 and 12 should students decide to sit for those exams.

English III			03220300
Grade: 11	Credit: 1	GPA: 4.0	

English III includes an intensive unit covering the modes and purposes of writing, the development of the multi--paragraph paper, the building of vocabulary skills, literary analysis, and an emphasis on grammar and usage skills. Emphasis is also placed on the process of writing the research paper. The literature study surveys major authors and periods in American literature.

AP English III Language and Composition		A3220100	
Grade: 11	Credit: 1	GPA: 6.0	

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based argumentative essays. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the effects of rhetorical elements in non-fiction texts, including graphic images, from many disciplines and historical periods. The academic rigor of this course and the vertical alignment of all Pre-AP courses help to prepare students for Advanced Placement exams that result in college credit by earning a qualifying score.

English IV			03220400
Grade: 12	Credit: 1	GPA: 4.0	

English IV focuses on the development of analytical and synthesizing skills through emphasis on student-generated learning. The curriculum reviews the development of the English language, and surveys British Literature from the Anglo-Saxon Era to modernism. The student reviews and refines language, grammar, and research skills within the context of writing in various modes for diverse purposes. Opportunities are offered for improving speaking skills. This course provides the student with the necessary skills for success in college literature and composition courses.

AP English IV Literature and Comp	osition	A3220200	
Grade: 12	Credit: 1	GPA: 6.0	
English IV Advanced Placement begins with an intensive review of literary terms and rhetorical skills introduced in AP English III, as well as a thorough overview			

of the various forms, styles, and periods of literature. Throughout the course, students will be exposed to various fictional and creative texts (novels, poetry, dramas, short stores, etc.), primarily from Europe, which they will be expected to analyze and discuss thoroughly, through both objective and subjective inquiry. At the end of the year, successful students will be able to interpret an unfamiliar piece of fiction perceptively, write cogent essays in a timed writing situation, and use higher-level verbal reasoning skills. The academic rigor of this course and the vertical alignment of all Pre-AP courses help to prepare students for Advanced Placement exams that result in college credit by earning a qualifying score.

English IV Dual Credit (San Jacinto College – ENG 1301/1302)		03220400	
Grade: 12	Credit: High School and College	GPA: 6.0	

Students enroll in English 1301 and 1302 at San Jacinto College North. Students receive one high school English IV credit and six semester hours of college credit. Participating students are responsible for tuition, fees, and books for these courses.

. King High School	Course Handbook 2024-25	

Grade: 9-12	Credit: 1	GPA: 4.0
Students enrolled in English Speakers of C	Other Languages I (ESOL I) continue to inc	rease and refine their communication skills. The seven strands of this course
mirror the essential knowledge and skills for	or English language arts and reading, which	h are intended to be integrated for instructional purposes and are recursive in
nature. Strands include the four domains o	of language (listening, speaking, reading, and	nd writing) and their application in order to accelerate the acquisition of
language skills so that students develop his	igh levels of social and academic language	proficiency.

English Speakers of Other Languages (ESOL) II		03200700	
Grade: 10-12	Credit: 1	GPA: 4.0	

Students enrolled in English Speakers of Other Languages II (ESOL 2) continue to increase and refine their communication skills. The seven strands of this course mirror the essential knowledge and skills for English language arts and reading, which are intended to be integrated for instructional purposes and are recursive in nature. Strands include the four domains of language (listening, speaking, reading, and writing) and their application in order to accelerate the acquisition of language skills so that students develop high levels of social and academic language proficiency.

Journalism		03230100
Grade: 9-12	Credit: 1	
and complete written comport critique, write and produce	ositions on a regular basis. Writing, technolog effective communications. Students will learn	ndwork for all yearbook and newspaper production. Students are expected to plan, draft y and visual and electronic media are used as tools for learning as students create, edit, journalistic texts and learn the principles of publishing. This course will be the study of esktop publishing software; Microsoft Publisher. Students may contribute to the

Journalism: Yearbook F	Production I
Grade: 10-12	Credit: 1
	n. Photojournalism, or Advisor approval

Yearbook Production is designed for students who are interested in studying the production of the school yearbook. The curriculum includes the following: group cooperative effort in the production of a yearbook; yearbook development within time constraints and budget limitations; financial responsibility in production and publication of a yearbook; planning and implementing advertising and circulation campaigns; cropping photographs for overall page planning; writing and editing copy; producing effective graphic art; writing effective headlines; and editing/proofreading. Students plan, report, edit, design, layout, finance, produce, and circulate a yearly publication, THE PANTHER. Students will use desktop publishing software: Microsoft Publisher, InDesign and Taylor Elitevision.

Journalism: Yearbook Production II

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production of publications.

Grade: 11-12 Credit: 1 Prerequisite: Yearbook Production I or Advisor approval

English Speakers of Other Languages (ESOL) I

Yearbook Production is designed for students who are interested in studying the production of the school yearbook. The curriculum includes the following: group cooperative effort in the production of a yearbook; yearbook development within time constraints and budget limitations; financial responsibility in production and publication of a yearbook; planning and implementing advertising and circulation campaigns; cropping photographs for overall page planning; writing and editing copy; producing effective graphic art; writing effective headlines; and editing/proofreading. Students plan, report, edit, design, layout, finance, produce, and circulate a yearly publication, THE PANTHER. Students will use desktop publishing software: Microsoft Publisher, InDesign and Taylor Elitevision.

#### Journalism: Yearbook Production III

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Grade: 12 Credit: 1 Prerequisite: Yearbook Production II or Advisor approval

Yearbook Production is designed for students who are interested in studying the production of the school yearbook. The curriculum includes the following: group cooperative effort in the production of a yearbook; yearbook development within time constraints and budget limitations; financial responsibility in production and publication of a yearbook; planning and implementing advertising and circulation campaigns; cropping photographs for overall page planning; writing and editing copy; producing effective graphic art; writing effective headlines; and editing/proofreading. Students plan, report, edit, design, layout, finance, produce, and circulate a yearly publication, THE PANTHER. Students will use desktop publishing software: Microsoft Publisher, InDesign and Taylor Elitevision.

03230130

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03230120

02220400

Newcomers English Language De	velopment (A&B)		N1280042/N1280043
Grade: 9-12	Credit: 1	GPA: 4.0	

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

Newcomers English Language Development (ELD) II			TBD
Grade: 10-12 Prerequisite: TBD	Credit: 1	GPA: 4.0	
TBD			
Photojournalism		0	3230800
Grade: 10-12 Prerequisite: Journalism	Credit: 1		

Photojournalism provides the opportunity for development of photography skills related to newspaper or yearbook production. Students practice and refine their skills in taking pictures, processing film, making prints, and cropping photos for editing and composition. Students develop proficiency in basic black-and-white darkroom procedures. Students must provide additional supplies not furnished by the school. The cost of these supplies is approximately \$50. Darkroom supplies may be required second semester, approximately \$30. This class will review the history of photography and the role it plays in society. Students will learn camera parts and operation, photographic composition, black and white processing and printing.

Practical Writing		03221300
Grade: 10-12	Credit: 0.5 – 1	

The study of writing allows high school students to earn one-half to one credit while developing skills necessary for practical writing. This course emphasizes skill in the use of conventions and mechanics of written English, the appropriate and effective application of English grammar, the reading comprehension of informational text, and the effective use of vocabulary. Students are expected to understand the recursive nature of reading and writing. Evaluation of students' own writing as well as the writing of others ensures that students completing this course are able to analyze and evaluate their writing.

University of Texas OnRamps – Englis	h IV	UE431A/UE431B
Grade: 12	Credit: 1 (possibility of earning 6 hrs. college credit if all requirements are met)	GPA: 6.0

OnRamps is a dual-enrollment program designed to increase the number and diversity of students who engage in college courses designed by faculty at The University of Texas at Austin and facilitated by high school teachers. During the first semester, the student must complete the coursework and meet the academic requirements to earn college credit.

OnRamps requires a one-time, annual non-refundable fee per student for each course. The fee is due prior to the beginning of the fall semester. The fee includes access to course materials, the learning management system, and technology tools.

0.5 high school credit is awarded for Semester A and 0.5 high school credit is awarded for Semester B. Successful completion of Semester A earns 3 college credits in ENG 1301. Successful completion of Semester B earns 3 college credits in ENG 1302.

PSAT/SAT/ACT Prep: Independent Stud	/ in English	03221800
Grade: 9-12	Credit: 0.5 – 1	

The SAT Prep course is designed to help students prepare for the rigors of taking the PSAT and/or SAT offered by the College Board. The primary goal is to identify and implement test taking strategies using prerequisite knowledge to increase student performance. The bulk of the class work will be centered upon drilling with practice and released PSAT/SAT exams, while simultaneously attempting to maximize the effectiveness of such drilling through the identification of individual students' specific areas of growth and opportunity. At the end of the course, students will be able to complete a PSAT/SAT exam with greater success and higher scores.

Social Intelligence for ESL Students		N1280041
Grade: 9-12	Credit: 0.5 – 1	

This course provides ESL students with the necessary knowledge and skills required for successful adaptation to a new community and educational environment. Students will learn skills to navigate through social situations, such as conflict resolution, communication, decision making, cultural awareness, etc.

# Fine Arts



# Art

Fine Arts and Humanities Endorsement				
Career Pathway         9 <sup>th</sup> Grade         10 <sup>th</sup> Grade         11 <sup>th</sup> Grade         12 <sup>th</sup> Grade				
Art	Art I	Art II – Ceramics I	Art III – Sculpture II	Art IV – Sculpture III OR AP Art & Design
		Art II – Drawing I	Art III – Painting II	Art IV – Painting III OR AP Art & Design

#### Art I

Grade: 9-12 Credit: 1

Art I is the foundation course for all other Art Classes. This entry-level art course allows students to explore the art elements for line, shape, value, texture, color, form and space while applying the principles of art to develop and create original artworks using a variety of art media. Students will analyze, interpret, and evaluate their own artwork as well as those of well-known artists comparing the different styles and techniques used throughout the various periods of art history. This introductory art course is designed for students to experiment with a wide variety of media and skills while providing an overview of the conceptual relationship of art to other subject areas.

Art II – Ceramics I		03500900
Grade: 10-12	Credit: 1	

Students may take either Art II Drawing or Ceramics for credit, but not both.

The Ceramics course is designed for students who are interested in the use of clay and associated materials to create 3D art pieces. The Ceramics class will utilize principles of design as they relate to the integration of depth and space, volume and surface.

Art II – Drawing I		03500500
Grade: 10-12	Credit: 1	

Students may take either Art II Drawing or Ceramics for credit, but not both.

This course is designed to teach mastery of academic drawing and two dimensional design. It will further the art experience through a variety of drawing media, techniques and vocabulary. Students will learn traditional drawing as well as experimental design techniques using wet and dry media. Art history, aesthetic awareness and appreciation, and the critical evaluation of art are integrated into the learning.

Art III – Painting II		03501400
<b>Grade: 10-12</b> Prerequisite: Art II – Drawing	Credit: 1	

Art III - Painting builds upon the skills learned in Art II - Drawing. This course is intended for art students who are interested in developing a portfolio in painting and two-dimensional design. A strong emphasis will be placed on learning painting techniques and styles in acrylic and watercolor, and students will continue to develop drawing and two-dimensional design skills to create original artworks. Art history, aesthetics, and criticism are included. Students may begin developing their own personal art styles throughout this course.

#### Art III – Sculpture II

Grade: 11-12 Prerequisite: Art II - Ceramics

Credit 1

Art III Sculpture builds upon the skills and concepts explored in Art II - Ceramics. This course is designed for students who are interested in the use of clay and other materials to create 3D art pieces. The Sculpture class will utilize principles of design as they relate to the integration of depth and space, volume and surface. Art history, aesthetics, and criticism are included. Students may begin developing their own personal art styles throughout this course.

03501900

Art IV - Painting is for the student who has successfully completed Art III - Painting and wishes to continue his or her investigation of painting and two dimensional design. Students will continue to develop a personal style and a portfolio of two-dimensional artwork.

Art IV – Sculpture III		03502800
Grade: 12 Prerequisite: Art III - Sculpture	Credit 1	

Art IV - Sculpture is for the student who has successfully completed Art III - Sculpture and wishes to further his or her investigation of sculpture and three dimensional design. Students will continue to develop a personal style and a portfolio of three-dimensional artwork.

AP Art & Design			2D Art: A3500400 3D Art: A3500500
Grade: 12	Credit: 1	GPA: 6.0	
Prerequisite: Art III and appro	oval from instructor		

The AP Art and Design course is designed for students who are seriously interested in the practical experience in art. In this class, students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, student submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. Students will choose between the three AP Portfolio exams—AP 2D Art & Design, AP 3-D Art & Design, and AP Drawing. Each of these corresponds to an introductory college art course for which the student could earn college credit, upon successful completion of the course and a passing score on the portfolio exam.



## Band

Fine Arts and Humanities Endorsement						
Career Pathway	Career Pathway 9th Grade 10th Grade 11th Grade 12th Grade 12th Grade					
	Band I	Band II	Band III	Band IV		
	Color Guard/Winter Guard I	Color Guard/Winter Guard II	Color Guard/Winter Guard III	Color Guard/Winter Guard IV		
Band	Jazz Band I	Jazz Band II	Jazz Band III	Jazz Band IV		
	Orchestra I	Orchestra II	Orchestra III	Orchestra IV		
	Percussion I	Percussion II	Percussion III	Percussion IV		

#### Band

During the fall semester, all band students are members of the marching band that rehearses daily after school hours and performs at all varsity football games, selected competitions, and local school and community events. Students in Marching Band in the fall semester may substitute a maximum of 1 units for the physical education graduation requirement with the remaining Band units applying toward Fine Arts and/or elective graduation requirements. Placement in a band ensemble is determined by an audition which includes students' technical proficiency, musical ability, and sight reading skills. Other factors include reliability, academic eligibility, ensemble instrumentation limitations, and personal commitment to ensemble requirements; placement is not necessarily related to the number of years in band. All ensembles perform at numerous concerts, community events, competitions, and festivals that require frequent rehearsals and performances after school hours. Attendance is required at all after school rehearsals and performances as part of the graded curricula.

#### Band I-IV

Grade: 9-12

Prerequisite: Consent of the Instructor

Credit: 1

The high school Band program provides four levels of Band classes during the school day. The instructional priorities include instructional technique, musicianship, critical listening, cultural growth, basic music theory, creative self-expression, rehearsal and concert etiquette, self-discipline, responsible citizenship, effective communication, problem solving, and production of quality products. Band students receive instruction on both marching band concert fundamentals. During marching band instruction, students learn marching fundamentals, spatial awareness, kinesthetic awareness and basic dance fundamentals. A variety of musical styles are performed. Importance is placed on physical conditioning, so students should be in good physical condition in order to participate. This includes summer preparation in band camp during the months of July and August. Concert season is ongoing and provides students an opportunity to continue musical growth and experience music literature. Individual musicianship as well as small and large ensemble concepts and skills are emphasized. Performances during the concert season include numerous concerts, festivals, and community events. Students may also participate in a series of auditions related to the all-state process as well as solo and ensemble competitions. Students enrolled in the band class must attend after school rehearsals and performances. According to the students' demonstrated proficiency during their audition, class period placements will be made in the appropriate Band grouping (i. e. Symphonic, Wind Symphony, Wind Ensemble, Percussion, etc.)

Students must complete one credit in Physical Education or an equivalent in order to receive a high school diploma. Marching Band substitutes for P.E. during the season it is offered with the remaining semesters of Band contributing toward the Fine Arts graduation requirement. Students may receive State elective credits for all semesters of Band that are not counted toward Physical Education or Fine Arts credits. According to the student's proficiency, specific campus placement will be made in the appropriate Band grouping (i.e. Symphonic, Concert, Percussion, etc.).

Color Guard/Winter Guard		03150100 - 03150400
Grade: 9-12 Prerequisite: Consent of the Instructor	Credit 1	

The Color Guard and Winter Guard performs original choreography to many different types of music using various types of equipment such as sabers, rifles, flags and other props. To make a stunning visual representation of the given piece of music, we rehearse frequently and are showcased at many different competitions and public performances.

In the fall semester, the Color Guard rehearses with the KHS Marching Band and performs with them at all times. Students are expected to attend multiple after school rehearsals each week. During the winter and spring seasons, the Winter Guard performs independently from the band on their indoor show. Full attendance and participation are required at all after school rehearsals and weekend performances.

Color Guard and Winter Guard are auditioned groups so students must attend and qualify in auditions in order to become a member of the group. Guard members are also members of the band and will follow the same rules and procedures as band students.

03150100 - 03150400

#### Jazz Band I-IV

Grade: 9-12 Credit: 1
Prerequisite: Consent of the Instructor

Students involved in the jazz program will be taking the next step in performing on their instrument by learning the various styles of the American art form. Jazz band members will play in traditional 'big band' instrumentation, but also in smaller groups (combos) and modified groups (brass band). Students will learn the varying styles of jazz (swing, bebop, Latin, funk, etc.) and the art of improvisation in those styles. The jazz band performs at band concerts and at various jazz festivals in the Houston area. Students will receive 1 Fine Arts Credit toward the Fine Arts requirement for graduation.

## Orchestra I-IV

**Grade: 9-12** *Prerequisite: Consent of the Instructor*  Credit: 1

Credit: 1

Credit: 1

For students playing a school owned instrument, there is a \$50 fee for the school year; all other instruments must be purchased or rented; additional fees will be required. These courses consist of concert playing, sight reading, small ensemble playing, and individual instrumental technique. Students learn the enjoyment and appreciation of music through the development of performance skills and disciplines. Public performance is an integral part of the orchestra experience. Students in grades 9-12 will comprise various classes according to achievement levels monitored by periodic auditions. Each student will audition for the appropriate orchestra. Members are expected to participate in extra rehearsals and performances that involve the orchestra as a whole. All styles of music are explored.

#### Percussion

**Grade: 9-12** *Prerequisite: Consent of the Instructor* 

Percussion students participate in the Marching Band and concentrate on technique, repertoire, and musical issues. Emphasis is placed on memorization, tone production, musicianship, an overview of all percussion instrument techniques, history, mechanics of movement, solo and ensemble literature, and practice techniques. Students will receive a 0.5 credit in the fall toward P.E. requirement and a 0.5 credit in the spring toward the Fine Arts requirement for graduation.



# Choir

		Fine Arts and Humanities E	ndorsement		
Career Pathway	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade 11 <sup>th</sup> Grade		12 <sup>th</sup> Grade	
Choir	Men's Choir I	Men's Choir II	Men's Choir III	Men's Choir IV	
	Women's Choir I	Women's Choir II	Women's Choir III	Women's Choir IV	
	Ladies Vocal Ensemble I	Ladies Vocal Ensemble II	Ladies Vocal Ensemble III	Ladies Vocal Ensemble IV	
	A Capella Vocal Ensemble I	A Capella Vocal Ensemble II	A Capella Vocal Ensemble III	A Capella Vocal Ensemble IV	
	Chamber Singers World Music Ensemble I	Chamber Singers World Music Ensemble II	Chamber Singers World Music Ensemble III	Chamber Singers World Music Ensemble IV	
	Music Appreciation I (available 9th – 12th Grade)				
	AP Music Theory (available 10 <sup>th</sup> – 12 <sup>th</sup> grade)				

#### A Capella Vocal Ensemble I-IV

**Grade: 10-12** *Prerequisite: Approval from Instructor* 

A Cappella choir is an advanced level choir for both male and female students who have had at least one year of high school level choir. This class is designed for students who have a passion for singing and a passion for excellence. The A Cappella Choir will compete at various events including UIL Concert and Sight-Reading. In this class, students will continue learning both fundamental and advanced levels of music theory, sight-reading, vocal production and music history. Approval from choir director is required to participate in this class. Please take note that there will be required after school rehearsals for this choir.

03152400

03150500 - 03150800

03151700 - 03152000

#### **Chamber Singers World Music Ensemble I-IV**

Grade: 10-12 Prerequisite: Approval from Instructor

singing music from all different countries and time periods.

Credit: 1

Chamber Singers choir is a varsity level choir for both male and female students who have had at least one year of high school choir. This class is designed for advanced choral students who possess a passion for singing and a passion for excellence. The Chamber Singers choir will compete in UIL Concert and Sight-Reading. Students in this class will learn advanced concepts of music theory, music history, sight- reading, and vocal production. All students in this class will be required to sing at the Region 19 Solo and Ensemble contest and audition for the Region 19 honor choir. There will be a formal audition process for this class and only 16 students will be accepted. Approval from a director after a scheduled audition will be required to participate in this class. All after school rehearsals and performances are mandatory. This course has a co-enrollment requirement of being in an additional choir. The second choir will be A Cappella or Ladies Ensemble at the discretion of the director.

Ladies Vocal Ensemble I-IV		03152100-03152400
Grade: 10-12 Prerequisite: Approval from Instructor	Credit: 1	

Ladies Ensemble is an advanced choir class for female students who have already had at least one year of high school level choir. This class is designed for female vocalists who have a passion for excellence. Ladies Ensemble will compete at various events including UIL Concert and Sight-Reading. In this class, students will continue learning both fundamental and advanced levels of music theory, sight -reading, vocal production and music history. Approval from choir director is required to participate in this class. Please take note that there will be required after school rehearsals for this choir.

Men's Choir I-IV Grade: 9 Credit: 1		03150900-03151200
Grade: 9	Credit: 1	
students who have an int	terest in choral singing. In this class, students will le	sophomores but is open to any first-time choir student. This class is designed for earn the fundamentals of music theory, sight-reading, vocal production and music There are no prerequisites to this class. Students who join this course will enjoy

Music Appreciation I		03155600
Grade: 9-12	Credit: 1	

Music appreciation is open to 9th -12th grade students who are in need of a fine arts credit but feel that they are not ready to be in a performance based class such as choir or band. In music appreciation we will cover topics such as: music history, music theory and composition from the earliest records of music all the way through music of today. We will also spend time every week working with different instruments including: piano, keyboard, percussion, voice, band instruments, and orchestra instruments. This class does not have regular after school commitments, nor are there any concerts. This class will be structured much like core classes with lectures, class work, home work and assessments.

AP Music Theory			A3150200
Grade: 10-12	Credit: 1	GPA: 6.0	

Music Theory is an advanced level course designed to engage students in learning activities that will help them to achieve the outcomes assessed by the College Board's Advanced Placement Music Theory Examination. The AP Music Theory course is designed to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. These abilities will be developed through various listening performance, written, creative, and analytical exercises. Although this course focuses on music of the Common Practice Period (1600-1900), materials and processes found in other styles and genres are also studied. This course has a co-enrollment requirement of being in band or choir.

Women's Choir I-IV		03151000-03151200
Grade: 10-12 Prerequisite: Approval from Instructor	Credit: 1	

Women's Chorus is a beginning level choir class specifically for freshman and sophomores but is open to any first-time choir student. This class is designed for students who have an interest in choral singing. In this class, students will learn the fundamentals of music theory, sight-reading, vocal production and music history. This is a performance based class and all concerts are mandatory. There are no prerequisites to this class. Students who join this course will enjoy singing music from all different countries and time periods.



## Dance

Credit: 1

		Fine Arts and Humanities E	ndorsement	
Career Pathway         9 <sup>th</sup> Grade         10 <sup>th</sup> Grade         11 <sup>th</sup> Grade         12 <sup>th</sup> Grade				
	Dance I	Dance II	Dance III	Dance IV
Dance	Drill Team I	Drill Team II	Drill Team III	Drill Team IV
Dunce		Dance Performance Ensemble I	Dance Performance Ensemble II	Dance Performance Ensemble III

#### Dance I

Grade: 9-12

Dance I is a performance-base, entry-level course that serves as a dance student's first year to be a member of a dance ensemble at the high school. Dance I students explore fundamental aspects of dance performance through basic technical dance applications as well as perform memorized movement sequences with rhythmical accuracy in several dance styles to including classical ballet, hip-hop, modem, jazz, and ethnic dance. Students will learn to incorporate appropriate movement/dance vocabulary when identifying qualities and discussing meaning of performance and production in dance. Students will identify historical figures and their significance in dance history.

Dance II	038302	)0
Grade: 10-12 Prerequisite: Dance I	Credit: 1	
Dance II is a performance-based, interme	diate-level course that serves as a dance student's second year to be a member of a dance ensemble at the high	

school. Students will learn to improvise dance phrases using the concept of abstraction by incorporating choreographic processes by altering time, space, dynamics, and intensity in dance styles. Students will analyze and critique their own as well as others' performance skills and production qualities in dance. Students identify similarities of form and expression in dance with other art mediums while applying dance-related skills.

Dance III	03830300
Grade: 11-12 Prerequisite: Dance I and II	Credit: 1
	nced-level course that serves as a dance student's third year to be a member of a dance ensemble at the high school. rm memorized and complex movement sequences with rhythmic accuracy, projection, confidence, and expression.

Dance IV			0
Grade: 11-12 Prerequisite: Dance I, II, and III	Credit: 1		

Students will analyze dance from a variety of perspectives such as those of dance critics, performers, choreographers, and audience members.

Dance IV is a performance-based/highly advanced-level course that serves as a dance student's fourth year to be a member of a dance ensemble at the high school. Dance IV students are expected to lead peers with understanding and respect by demonstrating refilled kinesthetic and spatial awareness, as well as self-evaluation, insight, movement inflection, and interpretation skills. Students will demonstrate knowledge of injury prevention rules and other health related principles when exercising, practicing, and performing. Students will perform dance movements with a refined sense of rhythm and musicality with clarity, expressiveness, and a wide range of spatial qualities by creating original dances using improvisation and other choreographic processes.

#### Dance Performance Ensemble I-III

Grade: 10-11 Credit: 1
Prerequisite: Drill Team 1 and Tryout Required

Dance Performance Ensemble I - III is an intense interdisciplinary program that combines performance elements such as dance, music, costumes and theatrical design with performance opportunities for small dance ensembles.

N1170034 - N1170035 - N1170036

#### Drill Team I, II, III, IV

Grade: 9-12 Prerequisite: Tryout Required Credit: 1

This course is designed for students selected to represent the high school on the drill team. This class meets during the school day and consists of conditioning activities, skill development in various dance routines, and choreographed programs. Specific preparations for game and competition performances are the foundation of this course. Students are required to attend all after-school practices as well as every performance outside of class time. Students gain membership through a try-out procedure held during the spring of the previous school year. Additional expenses for equipment are required.

Students must complete one credit in Physical Education or an equivalent in order to receive a high school diploma. Drill Team I substitutes for P.E. while Drill Team II – V contribute toward the Fine Arts graduation requirement. Students may receive State elective credits for all semesters of Drill Team that are not counted toward Physical Education or Fine Arts credits.



## Theatre

Fine Arts and Humanities Endorsement					
Career Pathway         9 <sup>th</sup> Grade         10 <sup>th</sup> Grade         11 <sup>th</sup> Grade         12 <sup>th</sup> Grade					
	Theatre Arts I	Theatre Arts II	Theatre Arts III	Theatre Arts IV	
Theatre	Theatre Production I	Theatre Production II	Theatre Production III	Theatre Production IV	
	Technical Theatre I	Technical Theatre II	Technical Theatre III	Technical Theatre IV	

#### **Technical Theatre I**

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Grade: 9-12
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Credit: 1

Technical Theatre I focuses on the offstage work in theatre including, but not limited to set design, safety, lighting, sound, costume, makeup, set construction and production. This course establishes a foundation in all aspects of technical theatre. This course involves basic carpentry, electrical design and setup, painting, research, and various design techniques for each of the technical elements.

Technical Theatre II, III, IV		03250600, 03251100, 03251200
Grade: 10-12	Credit: 1	

Prerequisite: Technical Theatre I OR must acquire written permission from the course teacher

Technical Theatre II-IV is a more advanced technical theatre class that builds on technical skills learned in Technical Theatre 1. This course delves deeper into the design and creating process. Students will be required to analyze plays and design appropriately for the different technical theatre offstage work such as set design, lighting, sound, costume, makeup, set construction, stage management, and production. This course also reinforces collaboration and sets up systems that provide leadership training and professional outlook on the field. Students will be required to create a portfolio that organizes their experience and artistic creations.

 Theatre Arts I
 03250100

 Grade: 9-12
 Credit: 1

Theater Arts I is a survey course that establishes the base for all subsequent theatre courses and serves as a general introduction to all of the fundamental aspects of the theatre that range from creative use of technical and production skills to the exploration of acting techniques. This course will focus on both the acting and technical aspects involved in the total theatre experience. The technical opportunities afforded students include: sound, sets, lights, costumes, props, and makeup. Basic craftsmanship skills will be taught with students mastering the use of various stage equipment and electrical tools utilizing in-model and full-size building and design. The acting/performance opportunities afforded students will include: acting, directing, analysis and interpretation of scripts, script reading, interdependence of all theatrical elements, appreciation of theatre, theatre etiquette, evaluation of theatrical experiences, and theatre history. This course is a prerequisite for Theatre Arts II or Technical Theatre II.

03250500

### Theatre Arts II

Grade: 10-12 Prerequisite: Theatre Arts I

Theatre Arts II builds on the background established in Theatre Arts I while continuing the development of acting skills through physical, vocal and improvisation exercises. Acting and directing principles are applied through performances and productions. This course also covers a more in depth analysis of the various theatrical modes including classical and contemporary theatre, drama, mime, musical theatre and TYA (Theatre for Young Audiences.) Students enrolled in this class will participate in ONE production that will be rehearsed in class.

### **Theatre Arts III**

Grade: 11-12 Prerequisite: Theatre Arts I and II

Theatre Arts III is an advanced-level, performance based course designed for the highly motivated, serious theatre student, further defining the concepts and skills acquired in Theatre Arts II. This course has an emphasis on the elements of directing and playwriting. Students write original plays and monologues. Various styles of theatre will be used including, but not limited to TYA (Theatre for Young Audiences) puppetry, classical theatre, musical theatre, and acting for the camera. Students enrolled in this class will participate in ONE production that will be rehearsed in class.

#### **Theatre Arts IV**

Grade: 12 Prerequisite: Theatre Arts I, II, and III

Theatre Arts IV is an advanced-level, performance based course designed for highly motivated, serious theatre students, further exploring the concepts and skills acquired in Theatre Arts III. This course has an emphasis on professional outlook on Theatre as whole. The course requires students to create a portfolio that will organize all their experience and skills. This course emphasizes Theatre Arts on the professional stage, for the camera, and other theatre role career venues. This course will emphasize self-responsibility and self-accountability in improving the student's art.

Theatre	Δrt	Produ	iction	I
meane	AIL	FIOUU	ICLION	L

Grade: 9

Credit: 1

Prerequisite: Students must acquire written permission from the course teacher or middle school theatre arts teacher

Theatre Arts Production I is intended for the acting student who wants to continue to develop skills that were learned from their middle school theatre program. Acting and directing principles are applied through performances in various theatrical modes including classical and contemporary theatre. This course also serves as a more in depth study of analysis and interpretation of scripts, script reading, interdependence of all theatrical elements, and theatre history. Enrollment in this class is contingent upon a referral from a middle-school theatre teacher or an audition with the high school department.

#### Theatre Art Production II, III, IV

Grade: 10-12 Credit: 1 Prerequisite: Students must acquire written permission from the course teacher

Theatre Production II-IV is designed for the serious drama student. Its emphasis will be on public and competitive performances. There will be work on advanced acting skills, improvisation, and script interpretation. Students will write and perform original script. Each student will be expected to work at an independent level in research and rehearsal of individual material. This course participates in the UIL One Act Play and students are required to be academically fit to participate.

03250700

03250400

03250800 - 03251000

03250300

Credit: 1

Credit: 1

Credit: 1

# Languages Other Than English (LOTE)

#### Accelerated Spanish I & II for Native Speakers GPA: 4.0 Grade: 9-12 Credit: 2 Prerequisite: Students conversant in Spanish who have had little or no formal training in their native language; Spanish Diagnostic Entrance Exam; Spanish teacher recommendation based on exam results and oral interview. This course is designed for the native Spanish-speaking students who are conversant in their native language but need improvement in the grammatical and writing skills. Emphasis will be placed on reading, writing, and higher order thinking skills. Course work will be done at an accelerated pace, covering two years' work in one year and receiving two high school Credit. Students who have completed Spanish I are not eligible for this course. French I Grade: 9-12 Credit: 1 GPA: 4.0 French I emphasizes development of the four basic language skills: listening, speaking, reading and writing. The class also stresses cultural awareness and appreciation of the French -speaking world, as well as an awareness of the French influence on the language and customs of North America. Class work includes

oral drills, dictation, vocabulary, composition and simple reading assignments, as well as dialogue, creative writing and multi-media presentations.

French II			03410200
<b>Grade: 10-12</b> Prerequisite: French I	Credit: 1	GPA: 4.0	

French II is a continuation of French I, emphasizing mastery of basic language patterns, using correct pronunciation and intonation. This class will read simple selections for comprehension and write short compositions. Students will continue to study French culture.

Pre-AP French III			03410300
Grade: 11-12 Prerequisite: French II	Credit: 1	GPA: 5.0	

French III is a continuation of French II. The student will have a variety of listening experiences, be able to discuss subjects of everyday interest, and have a broadened knowledge of grammar. By studying selections of increasing literary value the students will advance their reading skills and cultural understanding. Students will write original and guided compositions. Special assignments may include writing a paper, presenting poetry and skits, and writing letters.

AP French Language and Culture			A3410100
Grade: 12 Prerequisite: French III	Credit: 1	GPA: 6.0	

The AP French Language and Culture course emphasizes the interpersonal, interpretive, and presentational modes of French in real-life situations. This includes vocabulary, communication strategies, and cultural awareness. The course explores French culture and integrates six themes: beauty and aesthetics, contemporary life, families and communities, global challenges, personal and public identities, and science and technology. The course is taught almost exclusively in French, and students are expected to take the Advanced Placement French Language and Culture Exam.

Spanish I		03440	0100
Grade: 9-12	Credit: 1	GPA: 4.0	
Spanish I emphasizes devel	opment of the four basic language skills: lis	ening, speaking, reading and writing. The class also stresses cultural awareness and	

appreciation of the Spanish-speaking world as well as an awareness of the Spanish influence on the language and customs of North America. Class work includes oral drills, dictation, vocabulary, composition and simple reading assignments, as well as dialogue, creative writing and multi-media presentations.

Spanish II			03440200
Grade: 9-12 Prerequisite: Spanish I	Credit: 1	GPA: 4.0	

Spanish II is a continuation of Spanish I, emphasizing mastery of basic language patterns, using correct pronunciation and intonation. The class will read simple selections for comprehension and write short compositions. Students will complete projects to strengthen their language skills. Students will continue to study Hispanic culture.

03440110/03440220

03410100

Pre-AP Spanish III			03440300
Grade: 10-12 Prerequisite: Spanish II	Credit: 1	GPA: 5.0	

The student will have a variety of listening experiences, be able to discuss subjects of everyday interest, and have a broadened knowledge of grammar. By studying selections of increasing literary value, students will advance their reading skills and cultural understanding. Students will write original and guided compositions. Special assignments may include presenting poetry, skits, and writing letters.

AP Spanish Language and Culture			A3440100
Grade: 11-12 Prerequisite: Spanish III	Credit: 1	GPA: 6.0	

The AP Spanish IV curriculum is designed to perfect the student's proficiency in all aspects of language communication in preparation for the AP Spanish Language Examination. Class is conducted entirely in Spanish. Grammar will be thoroughly reviewed, new vocabulary and idiomatic expressions will be learned, and students will read and analyze selections from literature and other authentic written texts, including newspaper and magazine articles. Students will make frequent oral presentations, both spontaneous and prepared, in order to practice their speaking and listening skills. They will prepare frequent compositions and increase their listening comprehension through authentic audio and video recordings. Students will further their ability to integrate their language skills through formal writing that requires them to synthesize written and aural materials.

AP Spanish Literature and Culture			A3440200
Grade: 11-12 Prerequisite: Spanish III	Credit: 1	GPA: 6.0	

The AP Spanish Literature is equivalent to a college level introductory survey course of literature written in Spanish. Students continue to develop their interpretive, interpretive, interpretive, interpretive, and presentational skills in Spanish language as well as critical reading and analytical writing as they explore short stories, novels, plays, essays, and poetry from Spain, Latin America, and U.S. Hispanic authors along with other non-required texts.

Special Topics in Language and Cultur	8	11410000
<b>Grade: 10-12</b> Prerequisite: Spanish I OR French I	Credit: 1	

The study of world languages is an essential part of education. In the 21st century language classroom, students gain an understanding of two basic aspects of human existence: the nature of communication and the complexity of culture. Students become aware of multiple perspectives and means of expression, which lead to an appreciation of difference and diversity. Further benefits of foreign language study include stronger cognitive development, increased creativity, and divergent thinking. Students who effectively communicate in more than one language, with an appropriate understanding of cultural context, are globally literate and possess the attributes of successful participants in the world community.

# Mathematics

Foundation	Required for All Endorsements		Advanced Academics
Algebra I	Algebra I		Pre-AP Geometry*
Algebraic Reasoning	Algeb	ora II	Pre-AP Algebra II
Geometry	Geon	netry	Advanced Math
	Advanced Math**		Advanced Math**
Advanced math course options (see prerequisites in	course descriptions below):		
<ul> <li>Algebra III</li> <li>Dual Credit College Algebra</li> <li>AP Calculus AB</li> <li>College Preparatory Course Mathematics</li> <li>* Students in this pathway took Algebra I during 8<sup>th</sup> grade.</li> </ul>		AP Statistics	ess Decision Making (CTE Course) OnRamps – College Algebra

\*\* In order to earn a STEM Endorsement, students must take an additional advanced math course (see page 13).

Algebra I			03100500
Grade: 9	Credit: 1	GPA: 4.0	

The focus of Algebra I is to develop in the students the ability to work with linear functions and quadratic functions. The student will use these functions to develop relationships among the different types of functions and to understand the attributes of the function. The student will analyze functions graphically, verbally, numerically and symbolically. Included in the Algebra course is a study of the attributes and properties of polynomials, exponents, irrational numbers, inequalities and square roots and their connection to functions. The use of the graphing calculator is a major component in the teaching of this course and will be provided by the school.

Algebra II			03100600
Grade: 10-12 Prerequisite: Algebra I	Credit: 1	GPA: 4.0	

Algebra II is an advanced algebra course. It is designed for students who have mastered the content for Algebra I. Topics covered include mathematical structure, quadratic functions, quadratic relations, systems of equations, numerical methods and higher degree polynomials, exponential and logarithmic functions, rational algebraic functions, sequences and series, data handling, and analysis. Algebra II relates or extends concepts to previously learned material. The use of current technology as problem-solving and discovery tools is integrated throughout the course whenever possible. The next recommended course is Pre-Calculus or Algebra III.

Pre-AP Algebra II		(	03100600
Grade: 10-12 Prerequisite: Algebra I	Credit: 1	GPA: 5.0	

The Pre-AP Algebra II course provides a more in-depth coverage of all the topics in regular Algebra II as well as the study and writing of algebraic proofs. Students are required to analyze and to extend their learning of the basic concepts. They are provided extensive and challenging higher-level applications and real-world problems. Students are expected to do independent study and research and to present their research in some visual manner. The use of current technology as problem-solving and discovery tools is integrated throughout the course whenever possible. This course is designed for the self-motivated, mathoriented student with a willingness to investigate mathematics and meets the requirements for G/T. The next recommended course is Pre-Calculus.

Algebra III			03102500
Grade: 11-12	Credit: 1	GPA: 5.0	

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, probability, and conics may be included.

Algebraic Reasoning			03102540
Grade: 9-12	Credit: 1	GPA: 4.0	
Ctudanta will build an the kn	autodae and skills for mothematics in Kin	demonstran Crade 9 and Alashra Leantinus with the devel	approach of mothematical responsing

Students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I, continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses. Students will study functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness.

AP Calculus AB			A3100101
Grade: 12	Credit: 1	GPA: 6.0	

Prerequisite: Pre-Calculus

Advanced Placement Calculus AB covers the topics of elementary functions, differential and integral calculus. Students evaluate limits, analyze and apply the notions of continuity and differentiability to algebraic and trigonometric functions; use the concept of the derivative and the various formulas associated with it to investigate the properties of functions; use implicit differentiation to solve related rates, problems; construct detailed graphs of functions using differentiation; use basic integration techniques to solve simple differential equations; apply the Fundamental Theorem of Calculus to evaluate definite integrals and solve real world problems; differentiate and interpret logarithmic and exponential functions in addition to inverse trigonometric functions. The course is primarily concerned with an intuitive understanding of the concepts of Calculus with emphasis on methods and applications and meets the requirements for G/T. Whenever possible the use of technology is incorporated with traditional problem-solving methods. After successful completion of the course, the student should be prepared to take the College Board Calculus AB Advanced Placement exam in May.

College Preparatory Course Mathemati	cs		CP111200
Grade: 10-12 Prerequisite: Algebra II	Credit: 1	GPA: 4.0	

This course addresses a variety of mathematical topics needed to prepare students success in college-level mathematics. In this course students will connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines. In addition, the course supports students in developing skills and strategies needed to succeed in college. Mathematics topics include: numeracy with an emphasis on estimation and fluency with large numbers; manipulating and evaluating expressions and formulas, to include perimeter, area, and volume; rates, ratios, and proportions; percentages; solving equations; linear equations and inequalities; linear systems; exponential models; data interpretations including graphs and tables; verbal, algebraic, and graphical interpretations of functions. Mathematical process standards are also included in this framework; these process standards describe ways in which students are expected to engage in the content. Successful completion of this course, as defined by the memorandum of understanding (MOU) with the partnering institution(s), grants the student an exemption to TSI requirements for mathematics at the partnering institution(s).

Please note that College Preparatory Mathematics is not an approved NCAA course.

Geometry			03100700
<b>Grade: 9-12</b> Prerequisite: Algebra I	Credit: 1	GPA: 4.0	

Geometry is designed to develop an understanding of the basic structure of plane and spatial geometry. Developing the ability to analyze geometric relationships, make and verify conjectures, apply logical reasoning to justify and prove mathematical statements, and to use a variety of representations to describe geometric relationships and solve problems. This course allows students to apply algebraic skills in a logical and concrete manner.

Pre-AP Geometry			03100700
<b>Grade: 9-12</b> Prerequisite: Algebra I	Credit: 1	GPA: 5.0	

This course takes all of the goals of the regular Geometry course and further explores the content with an emphasis on problem solving in a multi-step format. Strategies and testing using the AP format are alternated with the intent of preparing students to enter our Advanced Placement mathematics program. Strong algebra skills and excellent study habits are required.

University of Texas OnRam	nps – College Algebra	UM531A/UM531B
Grade: 12	Credit: 1 (possibility of earning 3 hrs. college credit if all requirements are met)	GPA: 6.0

OnRamps is a dual-enrollment program designed to increase the number and diversity of students who engage in college courses designed by faculty at The University of Texas at Austin and facilitated by high school teachers. During the first semester, the student must complete the coursework and meet the academic requirements to earn college credit.

OnRamps requires a one-time, annual non-refundable fee per student for each course. The fee is due prior to the beginning of the fall semester. The fee includes access to course materials, the learning management system, and technology tools.

0.5 high school credit is awarded for Semester A and 0.5 high school credit is awarded for Semester B. Successful completion of Semester A and B earns 3 college credits in MATH 1301.

AP Pre-Calculus			A3100100
Grade: 11-12	Credit: 1	GPA: 6.0	

Grade: 11-12 Credit Prerequisite: Algebra I, Geometry and Algebra II

AP Pre-Calculus is taught to prepare students for AP Calculus. Students will study this math from a functional approach integrating the topics of trigonometry, elementary analysis, analytic geometry, and number theory. Topics studied in the course include: operations with functions, composite and inverse functions, graphing functions using symmetry and translation, and using functions to model real-world situations to find maximums or minimums; trigonometric circular functions, their inverses and graphs, trigonometric identity and equations, and solving triangles using the Law of Sines and the Law of Cosines; operations with and graphing of polynomial, rational, exponential, and logarithmic functions, solving equations with these functions; and using them to model real-world problems; properties and systems of real and complex numbers; polar coordinates and graphing polar equations; vectors; conic sections; Binomial Theorem; arithmetic and geometric sequences and series and their application in modeling real-world situations, limits, and proof by mathematical induction. Whenever possible the use of technology is incorporated with traditional problem-solving methods. This course meets G/T requirements. The next recommended course is Calculus.

AP Statistics			A3100200
Grade: 12 Prerequisite: Algebra II	Credit: 1	GPA: 6.0	

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data (Describing patterns and departures from patterns), Sampling and Experimentation (Planning and conducting a study), Anticipating Patterns (Exploring random phenomena using probability and simulation), and Statistical Inference (Estimating population parameters and testing hypotheses).

Students who successfully complete the course and exam may receive credit, advanced placement or both for a one-semester introductory college statistics course.

# **Physical Education, Athletics and Health**

Students are required to earn 1 credit of physical education to graduate. A maximum of 4 physical education credits can apply toward the state graduation requirements; any additional physical education credit will receive local credit only. As allowed by Chapter 74 of the Texas Administrative Code, students may substitute certain physical activities for graduation Credit required in physical education. The following physical activities will substitute 0.5 credit per semester towards the physical education state graduation requirements: Athletics, Cheerleading (fall semester only), Drill Team, JROTC, and Marching Band.

Athletics provides opportunities for students at KHS to compete competitively in a wide range of sports. Positions on the teams are determined through competitive tryouts.

Requirements for All Competitive Athletics:

- Before any student can tryout or begin any athletic activity, the student must have a completed physical as well as all required forms from the University
  Interscholastic League and Sheldon ISD on file in the Athletic Trainers' Office. A copy of all the forms can be downloaded from the Athletics webpage or can be
  obtained in the Athletic Trainers' Office. Forms are updated each spring for the following school year.
- KHS offers a wide variety of highly competitive athletic programs. Positions on an athletic team are earned through competitive tryouts. Depending on the sport, tryouts may be held in the semester prior to the activity or at the beginning of the semester when the activity is held. Additional tryouts may also be held at the beginning of the season. A schedule change is required in the event a student does not make an athletic team.
- All students who participate in athletics must adhere to all regulations regarding academic performance, citizenship, physical training guidelines, and attendance
  at practice. Extended practice time beyond the regular class period and school day will be required during the season. Athletes are required to travel to and
  from all competitions with their team unless excused by the coach.
- All students will be required to participate in the strength and conditioning program.

#### Athletics/Team Sports

Grade: 9-12

#### Credit: 1

Team sports introduce students to concepts, strategies, rules, and physical activity. Cardiovascular fitness is incorporated into each unit. Upon completion of this course, the student has learned skills necessary to perform a variety of successful physical activities. Below is a list of the team sports offered at C. E. King High School:

Girls' Athletics	Boys' Athletics
Basketball – Fall and Spring	Basketball – Fall and Spring
Tennis – Fall and Spring	Tennis – Fall and Spring
Volleyball – Fall	Football – Fall
Soccer – Spring	Soccer – Spring
Softball – Spring	Baseball – Spring
Track – Spring	Track – Spring
Golf – Spring (After-School ONLY)	Golf – Spring (After-School ONLY)
AFJROTC Competition Team	AFJROTC Competition Team

# Aerobic Activities PES00054 Grade: 9-12 Credit: 0.5

Students in aerobic activities are exposed to a variety of activities that promote health-related fitness. A major expectation of this course is for the student to design a personal fitness program that uses aerobic activities as a foundation.

#### Cheerleading

Grade: 9-12 Prerequisite: Tryout Required Credit: 0.5

Cheerleaders are responsible for leading the school in spirit activities and leading cheers at athletic events. Specific guidelines relating to participation, citizenship, and academics must be met and maintained in order to hold the position of cheerleader. A time commitment is crucial to this course. Additional practice or activity time outside of school is required. Constitution guidelines and procedures are available the month prior to tryouts.

**PES00013** 

PES00000 - PES00003

#### Color Guard (Flags)

Grade: 9-12

Prerequisite: Tryout Required

The Color Guard is a pageantry orientated performance ensemble. This group visually interprets selected musical repertoire utilizing flags and other props together with basic dance moves, original choreography, and traditional marching techniques. Students are expected to attend all Marching Band rehearsals and abide by all rules of the C. E. King High School Marching Band. During the spring semester, the Color Guard will learn a choreographed routine and compete at local "winter guard" competitions. Attendance at all rehearsals, sectionals, and performances are mandatory. Please note that year-long participation is required, and students are expected to practice after regular school hours.

#### Drill Team I

Grade: 9-12 Prerequisite: Tryout Required

This course is designed for students selected to represent the high school on the drill team. This class meets during the school day and consists of conditioning activities, skill development in various dance routines, and choreographed programs. Specific preparations for game and competition performances are the foundation of this course. Students are required to attend all after-school practices as well as every performance outside of class time. Students gain membership through a try-out procedure held during the spring of the previous school year. Additional expenses for equipment are required.

Students must complete one credit in Physical Education or an equivalent in order to receive a high school diploma. Drill Team I substitutes for P.E. while Drill Team II – IV contribute toward the Fine Arts graduation requirement. Students may receive State elective credits for all semesters of Drill Team that are not counted toward Physical Education or Fine Arts credits.

Foundations of Personal Fitness		PES00052
Grade: 9-12	Credit: 0.5	
Foundations of Personal Fitness represen	ts a new approach in physical education and the concept of personal fitness. The basic purpose of this cou	se is to

motivate students to strive for lifetime personal fitness with an emphasis on the health-related components of physical fitness. The knowledge and skills taught in this course include teaching students about the process of becoming fit as well as achieving some degree of fitness within the class. The concept of wellness, or striving to reach optimal levels of health, is the corner stone of this course and is exemplified by one of the course objectives-students designing their own personal fitness program.

Health is designed to give students practical knowledge that will help them keep physically fit and mentally healthy throughout their lives. The scope of this course includes three-week studies of each of the following: education in healthy sexuality (relationships, reproduction, family planning, sexually transmitted diseases), emergency care (CPR, first aid), healthful lifestyles (nutrition, fitness), mental and social health (teen suicide and stress management), chemical substance abuse

#### Health

Grade: 9-12

Credit: 0.5

Credit: 1

Credit: 1

#### **Individual Sports** PES00055 Grade: 9-12 Credit: 0.5 Students in Individual Sports are expected to participate in a wide range of individual sports that can be pursued for a lifetime. The continued development of health-related fitness and the selection of individual sport activities that are enjoyable is a major objective of this course.

Team Sports		PES00055
Grade: 9-12	Credit: 0.5	

Students enrolled in Team Sports are expected to develop health-related fitness and an appreciation for team work and fair play. Like the other high school physical education courses, Team Sports is less concerned with the acquisition of physical fitness during the course than reinforcing the concept of incorporating physical activity into a lifestyle beyond high school.

PES00012, 03150100

PES00014, 03830200 - 0380400

#### (drugs, alcohol, tobacco), and current health issues (research papers and oral presentations). Class work for the course includes a variety of activities such as teacher-led discussions, newspaper reports, role playing, guest lecturers, student-led large/small discussion groups, and appropriate audio-visual materials.

03810100

# Science

Foundation	Required for All Endorsements		Advanced Academics
IPC	Biology		Pre-AP Biology
Biology	Chei	nistry	Chemistry (Pre-AP or AP)
Chemistry	Phy	vsics	Advance Science
	Advanced Science*		Advance Science*
Physical advanced science course options (see prerequisites in course descriptions below):		Advanced science course options (see prerequisites in course descriptions below):	
<ul> <li>Integrated Physics and Chemistry (IPC)</li> <li>Chemistry</li> <li>Pre-AP Chemistry</li> <li>AP Chemistry</li> <li>Physics</li> <li>AP Physics I</li> <li>University of Texas OnRamps – Physics</li> </ul>		<ul> <li>Advanced Animal So</li> <li>Advanced Plant and</li> <li>Anatomy and Physic</li> <li>AP Biology</li> <li>Earth &amp; Space Scier</li> <li>Environmental Syste</li> <li>Forensic Science (C</li> </ul>	Soil Science (CTE course) ology (CTE course) nce ems
Note: Students must earn one credit in Physical adva	nced science.		
* In order to earn a STEM Endorsement, students must	t take an additional advance	ed science course (see page	e 13).

Biology			03010200
Grade: 9	Credit: 1	GPA: 4.0	

Biology includes the study of cells, plant and animal processes, genetics and ecology through classroom and laboratory experience. The study develops scientific attitudes, skills in the use of the scientific method and relates the vast store of scientific knowledge to solving problems in today's world.

Pre-AP Biology			03010200
Grade: 9	Credit: 1	GPA: 5.0	

This course includes all the concepts of Biology, but with more in-depth study and an expectation of increased homework. It is designed to provide a framework of rigorous academic challenge to prepare students for the AP Biology Exam. Laboratory (or out-of-school fieldwork) is designed to develop a critical approach to high level problem solving. A lab notebook analyzing data with detailed discussion is required. Oral, written, study and research skills are emphasized through various types of activities. Excellent study habits are imperative.

AP Biology			A3010200
Grade: 11-12	Credit: 1	GPA: 6.0	

AP Biology course work is evaluated and approved by the College Board. A college level laboratory notebook will be used. This course is equivalent to collegelevel general biology for science majors and is designed to prepare the student to take the College Board Advanced Placement examination. Three general areas (molecules and cells, genetics and evolution, and organisms and populations) are studied. Laboratory work is an integral part of the course. The aim of the course is to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically and effectively with the rapidly changing science of biology. The text is a college-level text. Students are expected to take the Advanced Placement exam given in the spring.

Chemistry			03040000
Grade: 10-12	Credit: 1	GPA: 4.0	
Prereguisite: Algebra I and Biology			

Chemistry is designed to achieve the following objectives: to become proficient in the use of the scientific method and laboratory equipment, to solve problems using dimensional analysis and the mole concepts, to understand the properties of matter and energy, to use this information quantitatively and qualitatively to predict chemical behavior, and to develop an appreciation for the work of earlier scientists as well as ongoing scientific research. Chemistry is a concept-oriented course. Good mathematics skills are essential to success in this class. Laboratory safety and technique are emphasized throughout the year. Grades are based on tests, lab reports, and daily assignments, with the emphasis placed on tests.

Pre-AP Chemistry		0304000
Grade: 10-12 Prerequisite: Algebra I and Biology	Credit: 1	GPA: 5.0
to solve problems using dimension and qualitatively to predict chemica	al analysis and the mole concep al behavior, and to develop an a proach. Study and perseverance	objectives: to become proficient in the use of the scientific method and laboratory equipment, ots, to understand the properties of matter and energy, and to use this information quantitatively ppreciation for the work of earlier scientists. Chemistry is a concept-oriented course where e are a must. As an end product of this course, the student gains a creative and inquisitive
AP Chemistry		A304000
Grade: 11-12 Prerequisite: Algebra II and Chemi	Credit: 1 istry)	GPA: 6.0
	ed field. Advanced laboratory in	nemistry. Laboratory techniques are developed to further the student's ability to pursue a caree vestigations of atomic theory, properties of matter, chemical reactions, kinetics, and equilibrium ment exam given in the spring.
Earth and Space Science		0306020
Grade: 11-12 Prerequisite: three units of science	<b>Credit: 1</b> (one of which may be taken co	GPA: 4.0 ncurrently) and three units of mathematics (one of which may be taken concurrently)
Earth and Space Science is a caps Earth's system in space and time.		n student's prior scientific and academic knowledge and skills to develop understanding of f:
	ollection of complex, interacting,	g of the origin, evolution, and properties of Earth and planetary systems within a chronological dynamic subsystems linking Earth's interior to its surface. The fluid Earth consisting of the
Environmental Systems		0302000
Grade: 11-12 Prerequisite: Biology and Chemisti	Credit: 1 ry or IPC	GPA: 4.0
critical thinking and scientific proble	em solving. Students study a var s and an environmental system,	nvestigations, use scientific methods during investigations, and make informed decisions using riety of topics that include: biotic and abiotic factors in habitats, ecosystems and biomes, sources and flow of energy through an environmental system, relationship between carrying s in environments.
Integrated Physics and Chemist	ry (IPC)	0306020
Grade: 9-10	Credit: 1	GPA: 4.0
continuing with more advanced sci presented. In the chemistry portion reactions, solutions and mixtures a	ence courses. Although this cou of the course, material classific ire introduced. In the physics por n integral part of this course, are	ion in the physical sciences for those students seeking additional skill development before irse is taught in a conceptual manner, mathematical analysis of scientific concepts is also ation, atomic structure, interpretation of the periodic table, compound structures, chemical rtion of the course, topics such as forces, waves, sound, light, heat, and electricity are used not only to reinforce concepts, but also to give students hands-on experience in making s.
Physics		0305000
<b>Grade: 11-12</b> Prerequisite: Algebra I	Credit: 1	GPA: 4.0
Physics is designed for students in	terested in science and planning	g a career in engineering, technical business, science, or mathematics. Topics covered in the

Physics is designed for students interested in science and planning a career in engineering, technical business, science, or mathematics. Topics covered in the course include kinematics, dynamics, heat, light, sound, and electricity. Class work includes demonstrations, lectures, class discussions, and problem-solving activities. Laboratory activities help to extend the understanding of basic physical concepts.

AP Physics I			A3050001
Grade: 11-12 Concurrent with Calculus	Credit: 1	GPA: 6.0	

AP Physics I is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits.

# University of Texas OnRamps – Physics TBD Grade: 12 Credit: 1 (possibility of earning 3 hrs. college credit if all requirements are met) GPA: 6.0

OnRamps is a dual-enrollment program designed to increase the number and diversity of students who engage in college courses designed by faculty at The University of Texas at Austin and facilitated by high school teachers. During the first semester, the student must complete the coursework and meet the academic requirements to earn college credit.

OnRamps requires a one-time, annual non-refundable fee per student for each course. The fee is due prior to the beginning of the fall semester. The fee includes access to course materials, the learning management system, and technology tools.

0.5 high school credit is awarded for Semester A and 0.5 high school credit is awarded for Semester B. Successful completion of Semester A and B earns 3 college credits in TBD.

# **Social Studies**

Foundation/ Required for All Endorsements*	Advanced Academics
World Geography	Pre-AP World Geography
World History	AP World History
U.S. History	AP U.S. History
Government and Economics	AP US Government & Politics and AP Macroeconomics

\* Sheldon ISD requires all students to have 4 credits in social studies.

\*\* In order to earn an Arts and Humanities Endorsement, students must take an additional social studies course (see page 8).

Economics			03310300
Grade: 12	Credit: 0.5	GPA: 4.0	

Economics concentrates on the economic concepts, laws, and principles as they apply to comparative economic systems, with emphasis on the free enterprise system of the United States. Students examine the monetary and fiscal policies of the United States, apply economic knowledge to practical economic functions including the Federal Income Tax, review current events, and examine trends in the United States and global economics.

Ethnic Studies: African American Studies			03380085
Grade: 10-12	Credit: 1	GPA: 4.0	

In Ethnic Studies: African American Studies, an elective course, students learn about the history and cultural contributions of African Americans. This course is designed to assist students in understanding issues and events from multiple perspectives. This course develops an understanding of the historical roots of African American culture, especially as it pertains to social, economic, and political interactions within the broader context of United States history. It requires an analysis of important ideas, social and cultural values, beliefs, and traditions. Knowledge of past achievements provides citizens of the 21st century with a broader context within which to address the many issues facing the United States.

Ethnic Studies: Mexican American Studies			03380084
Grade: 10-12	Credit: 1	GPA: 4.0	

In Ethnic Studies: Mexican American Studies, an elective course, students learn about the history and cultural contributions of Mexican Americans. Students explore history and culture from an interdisciplinary perspective. The course emphasizes events in the 20th and 21st centuries, but students will also engage with events prior to the 20th century.

Introduction to Philoso	ophy Dual Credit (San Jacinto College)	0338002
Grade: 11	Credit: 0.5	
	general overview of the historical development and the major systems of the philosophic thought. The ry, and the existence of God.	nature of man, knowledge, morality,

Introduction to Sociolog	gy Dual Credit (San Jacinto College)	03380032
Grade: 11	Credit: 0.5	
		oups, social institutions and individuals affect each other. Causes of social al perspectives, key concepts, and related research methods of sociology.

Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance.

Learning Framework Foundation of Success Dual Credit (San Jacinto College)03380023Grade: 11Credit: 0.5

The purpose of EDUC1300/PSYC 1300 is to enable you to develop effective academic behaviors for college success. The course includes a balance between the research and theory in the psychology of learning, cognition, and motivation and how to apply what you learn to becoming successful in a college setting. You will understand the factors that affect assessment instruments, such as learning inventories, to help you identify your own strengths and weaknesses as a strategic learner. You are ultimately expected to integrate and apply the learning skills discussed across your own academic courses and program and become an effective and efficient learner. As you develop these skills, you should be able to continually draw from the theoretical models and apply this to your courses and to your life.

		A3310
Grade: 12	Credit: 0.5	GPA: 6.0
between absolute and comp can take place between indiv explored include the function	arative advantage, and apply the principle o viduals and/or countries, and to identify com is performed by an economic system, and th so introduce the concept of the business cyc	concepts such as scarcity and opportunity costs. Students understand the distinction i comparative advantage to determine the basis on which mutually advantageous trac parative advantage from differences in opportunity costs. Other basic concepts that a se way the tools of supply and demand are used to analyze the workings of a free ma le to give students an overview of economic fluctuations and to highlight the dynamic
Personal Financial Literac	Y	0338
Grade: 10-12	Credit: 0.5	GPA: 4.0
	nd understand personal financial responsibi	e and skills to make sound, informed financial decisions that will allow them to lead lity. The knowledge gained in this course has far-reaching effects for students person
Special Topics in Social St	udies – United States History through Fi	m 0338
Grade: 11-12	Credit: 0.5 – 1	GPA: 4.0
pieces on topics related to th	e political, social, economic, and racial histo	s will be done through viewing, writing, and discussing both historical and contempor- ry of the word. After reviewing early United States history (1607-1865), students will
Progressive Era, World War		effects on the United States, overseas expansion and the building of an empire, the s and the Great Depression, the New Deal and its successes and challenges, World
Progressive Era, World War I, and foreign and domestic	I and the League of Nations, the Roaring 20	effects on the United States, overseas expansion and the building of an empire, the
Progressive Era, World War II, and foreign and domestic Special Topics in Social St	I and the League of Nations, the Roaring 20 affairs from 1945 to the present.	effects on the United States, overseas expansion and the building of an empire, the s and the Great Depression, the New Deal and its successes and challenges, World
Progressive Era, World War II, and foreign and domestic <b>Special Topics in Social St</b> <b>Grade: 11-12</b> Students will study world his	I and the League of Nations, the Roaring 20 affairs from 1945 to the present. udies – World History through Film Credit: 0.5 – 1	effects on the United States, overseas expansion and the building of an empire, the s and the Great Depression, the New Deal and its successes and challenges, World 0338 GPA: 4.0 done through viewing, writing, and discussing both historical and contemporary piece
Progressive Era, World War I, and foreign and domestic Special Topics in Social St Grade: 11-12 Students will study world his popics related to the political,	I and the League of Nations, the Roaring 20 affairs from 1945 to the present. <b>Indies – World History through Film</b> <b>Credit: 0.5 – 1</b> tory through the medium of film. This will be	effects on the United States, overseas expansion and the building of an empire, the s and the Great Depression, the New Deal and its successes and challenges, World 0338 GPA: 4.0 done through viewing, writing, and discussing both historical and contemporary piece
Progressive Era, World War I, and foreign and domestic Special Topics in Social St Grade: 11-12 Students will study world his opics related to the political, United States History	I and the League of Nations, the Roaring 20 affairs from 1945 to the present. <b>Indies – World History through Film</b> <b>Credit: 0.5 – 1</b> tory through the medium of film. This will be	effects on the United States, overseas expansion and the building of an empire, the s and the Great Depression, the New Deal and its successes and challenges, World 0338 GPA: 4.0 done through viewing, writing, and discussing both historical and contemporary piece vorld.
Progressive Era, World War II, and foreign and domestic Special Topics in Social St Grade: 11-12 Students will study world his topics related to the political, United States History Grade: 11 U.S. History since Reconstru- results, and attempting to sh investigate reconstruction, W Progressive Era, World War	I and the League of Nations, the Roaring 20 affairs from 1945 to the present. <b>tudies – World History through Film</b> <b>Credit: 0.5 – 1</b> tory through the medium of film. This will be social, economic, and racial history of the v <b>Credit: 1</b> uction surveys the significant events, issues, ow the students how they may be affected b /estward Expansion, industrialization and its	effects on the United States, overseas expansion and the building of an empire, the s and the Great Depression, the New Deal and its successes and challenges, World 0338 GPA: 4.0 done through viewing, writing, and discussing both historical and contemporary piece orld. 0334
Progressive Era, World War II, and foreign and domestic Special Topics in Social St Grade: 11-12 Students will study world his topics related to the political, United States History Grade: 11 U.S. History since Reconstru- results, and attempting to sh investigate reconstruction, W Progressive Era, World War	I and the League of Nations, the Roaring 20 affairs from 1945 to the present. <b>Tudies – World History through Film</b> <b>Credit: 0.5 – 1</b> tory through the medium of film. This will be social, economic, and racial history of the v <b>Credit: 1</b> uction surveys the significant events, issues, ow the students how they may be affected b /estward Expansion, industrialization and its I and the League of Nations, the Roaring 20	effects on the United States, overseas expansion and the building of an empire, the s and the Great Depression, the New Deal and its successes and challenges, World 0338 GPA: 4.0 done through viewing, writing, and discussing both historical and contemporary piece rorld. 0334 GPA: 4.0 and problems in Untied States History since Reconstruction, considering the causes y similar situations. After reviewing early United States history (1607-1865), students effects on the United States, overseas expansion and the building of an empire, the

This course surveys the events in United States History from the arrival of the Indians to the present, with the following units: discovery, colonization, the American Revolution and formation of a government, the Jacksonian Era, the Civil War, Westward Expansion, the Industrial Revolution, the Gilded Age, the Progressive Era, the emergence of the United States as a world power, business and culture, World War II, superpowers in the missile age, a dissenting generation, and the start of the third century. This course objective prepares the student for the Advanced Placement exam. Upon successful completion of the AP exam, a student may be awarded college credit.

The class is designed to emulate a college course. This class places a greater emphasis on higher-level thinking and writing skills than the regular U.S. History course. The student will read and evaluate a large amount of material and is expected to conduct independent and guided research. This course meets the requirements for G/T.

United States Governmen	t		0333010
Grade: 12	Credit: 0.5	GPA: 4.0	
	plitical parties and ideologies; voting and elec	e United States and Texas, the national and state const ctions; interest groups and lobbying; civil rights; and the	
AP United States Governm	nent and Politics		A333010
Grade: 12	Credit: 0.5	GPA: 6.0	
ncludes both the study of g he various institutions, grou pertaining to U.S. government erpret basic data relevan	uppeneral concepts used to interpret U.S. gover ups, beliefs, and ideas that constitute U.S. go ent and politics, understand typical patterns of	an analytical perspective on government and politics in nment and politics and the analysis of specific examples overnment and politics. Students will learn important fac of political processes and behavior and their consequence data presented in charts, tables, and other formats) and heir connections across the curriculum.	s. It also requires familiarity with ts, concepts, and theories ces, be able to analyze and
Inited States Governmen	t Dual Credit (San Jacinto College)		0333010
Grade: 12	Credit: 1 (0.5 High School	; 0.5 is College) GPA: 6.0	
Students receive 0.5 high s his course and must provid		rrs of college credit. Participating students are responsit	ble for tuition, fees, and books for
Vorld Geography			0332010
Grade: 9	Credit: 1	GPA: 4.0	
vith respect to the economi	ic, social and cultural impact on the environm	hysical characteristics and natural resources of various nent and resources. The student will acquire and refine r vironment with special attention to urban growth.	
Pre-AP World Geography			0332010
Grade: 9	Credit: 1	GPA: 5.0	
	nhy, students study the same objectives as i	n World Geography but at a more in-depth level. The co	ourse will be enriched with the
		ojects. Excellent study habits are imperative.	
tudy of world literature, pri			0334040
tudy of world literature, pri Vorld History			
tudy of world literature, pri Vorld History Grade: 10 Vorld History provides an coundations of civilization, tl	mary sources, case studies, and research pr Credit: 1 overview of the development of civilization in he classical world, development of nations in	ojects. Excellent study habits are imperative.	0334040 nt. Students explore the enaissance and Reformation. They
tudy of world literature, pri Vorld History Grade: 10 Vorld History provides an c bundations of civilization, ti Iso investigate the growth	mary sources, case studies, and research pr Credit: 1 overview of the development of civilization in he classical world, development of nations in	ojects. Excellent study habits are imperative. GPA: 4.0 all parts of the globe from prehistoric times to the prese the Far East and Middle East, the Middle Ages, and Re	0334040 nt. Students explore the enaissance and Reformation. They y of the twentieth century.
study of world literature, pri World History Grade: 10 World History provides an of foundations of civilization, the also investigate the growth AP World History Grade: 10	mary sources, case studies, and research pr Credit: 1 overview of the development of civilization in he classical world, development of nations in	ojects. Excellent study habits are imperative. GPA: 4.0 all parts of the globe from prehistoric times to the prese the Far East and Middle East, the Middle Ages, and Re	0334040 nt. Students explore the enaissance and Reformation. They

from the earliest times to the present. Included in the study are the foundations of civilization, comparative religions, Greek philosophies, Middle Ages, Renaissance and Reformation. Additional emphasis is placed on the growth of the nation- state and nationalism, revolution and world war, and the effects of imperialism on the Far East, Africa, and Latin America. Higher level thinking skills including individual research and critical analysis on selected topics will be incorporated into problem solving studies. This course meets the requirements for G/T.

# **Specialty Courses**

Public Service Endorsement					
Career Pathway	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	
Air Force Junior Reserve Officer Training Corps (AFJROTC)	AFJROTC 1	AFJROTC 2	AFJROTC 3	AFJROTC 4	

#### Air Force Junior Reserve Officer Training Corps (AFJROTC)

Prerequisite: Approval of the Senior Aerospace Science Instructor

The mission of the Air Force Junior ROTC is to, "Develop citizens of character dedicated to serving their nation and community." The objectives of the program are to educate and train high school students in citizenship; promote community service; instill responsibility, character, and self-discipline; and provide instruction in air and space fundamentals. Each course is divided into three areas of instruction: Aerospace Science (40%), Leadership Education (40%), and Health & Wellness (20%). Drill and ceremonies is integrated into the Leadership Education portion and is part of every course. Here cadets are provided fundamental and in-depth instruction in Air Force drill and ceremonies. Health and Wellness is also part of every course. It is a mental and physical program focused on individual baseline improvements in set exercises with the goal of achieving a national standard based on age and gender. The objective is to motivate students to lead an active, healthy lifestyle beyond program requirements into their adult lives. AFJROTC 1 may substitute ½ credit per semester towards the physical education state graduation requirements. Students can earn college credit from the University of Colorado at Colorado Springs or Adams State College for each year of AFJROTC.

NOTE: AFJROTC is designed as a four-year course of study for high school students beginning with the freshman year. Sophomores and juniors with no previous JROTC experience may be enrolled in AFJROTC beginning with ROTC1 with approval of the Senior Aerospace Science Instructor. Seniors with no previous JROTC experience may not enroll in AFJROTC.

#### **AFJROTC 1**

Grade: 9-11

#### Credit: 1

This is the basic course for all new AFJROTC students. It is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern day. The emphasis is on civilian and military contributions to aviation; the development, modernization, and transformation of the Air Force; and a brief astronomical and space exploration history. It is interspersed with concise overviews of the principles of flight to include basic aeronautics, aircraft motion and control, flight power, and rockets. Leadership Education is an introduction to the AFJROTC program including instruction of organizational structure; uniform wear; customs, courtesies, and other military traditions. Drill and Wellness are also an integral part of this course.

#### **AFJROTC 2**

Grade: 10

Credit: 1 Prerequisite: At minimum successful completion of JROTC 1

Course is for second year AFJROTC students. Students will begin to assume positions of leadership and responsibility in the Cadet Corps. The Aerospace Science portion of the course begins with the space environment moving into an in-depth examination of our earth, the Moon and the planets, the latest advances is space technology, and continuing challenges of space and manned spaceflight. The course is designed to complement materials taught in math, physics, and other science-related courses. Leadership Education 200 portion of the course stresses developing vision and teams, solving conflicts and problems, exploring a leadership model, and how to implement adaptive leadership. Leadership Education 300 portion of the course provides an essential component of leadership education for today's high school students. The course focuses charting your course to achieve your life goals, applying for jobs, working for the Federal Government, and developing your career skills. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace. Unlocking Your Potential (UYP) is also part of this course which specifically focuses on three ingredients that make up a person's potential, building a positive self-image, using positive self-talk, how to put visualization to work for you, the importance of goal setting, and the six characteristics all high performers sh.are. Drill and Wellness are also an integral part of this course.

#### **AFJROTC 3**

Grade: 11

Credit: 1 Prerequisite: At minimum successful completion of JROTC 1

Course is for third year AFJROTC students. Students will qualify to hold mid and upper level positions of leadership and management in the Cadet Corps. The Aerospace Science portion of the course begins with the space environment moving into an in-depth examination of our earth, the Moon and the planets, the latest advances is space technology, and continuing challenges of space and manned spaceflight. The course is designed to complement materials taught in math, physics, and other science-related courses. Leadership Education 200 portion of the course stresses developing vision and teams, solving conflicts and problems, exploring a leadership model, and how to implement adaptive leadership. Leadership Education 300 portion of the course provides an essential component of leadership education for today's high school students. The course focuses charting your course to achieve your life goals, applying for jobs, working for the Federal Government, and developing your career skills. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace. Unlocking Your Potential (UYP) is also part of this course which specifically focuses on three ingredients that make up a person's potential, building a positive self-image, using positive self-talk, how to put visualization to work for you, the importance of goal-setting, and the six characteristics all high performers share. Drill and Wellness are also an integral part of this course.

03160100/PES00004

03160200

03160300

### AFJROTC 4 Grade: 12

Credit: 1

Prerequisite: At minimum successful completion of JROTC 1

Course is for fourth year AFJROTC students. Students will qualify for top level positions of leadership and management in the Cadet Corps. The Aerospace Science portion consists of the hands-on experience were cadets are afforded the opportunity to put theories of previous leadership courses into practice by managing the entire corps. The instruction also includes a block of college ePrep which helps cadets with college application and scholarship applications. They will put into practice their communication, decision-making, personal-interaction, managerial, and organizational skills. Leadership Education provides exposure to many leadership topics that will benefit the students as well as provide them the necessary skills needed to put into practice what they have learned during their time in AFJROTC. Drill and Wellness are also an integral part of this course.

#### AFJROTC Competition Teams

PES00055

N129001 - N129002 - N129003 - N129004

N1290040/N1290041

03160400

Grade: 9-12 Credit: 1
Prerequisite: Approval of the Senior Aerospace Science Instructor
Corequisite: Must be enrolled in a AFJROTC course

This course is designed for AFJROTC students selected to represent the high school on one of the JROTC Competition Teams. Competition Teams introduces students to concepts, strategies, rules and physical activity. Cardiovascular fitness and strength training are incorporated into each unit. Specific preparations for competition are the foundation of this course. Upon completion of this course, the student has learned skills necessary to compete on various teams and perform a variety of successful physical activities. This course meets during the school day. Students are required to attend all after-school practices. Competition Teams offered at C.E. King High School Air Force JROTC are Unarmed Drill, Armed Drill, Color Guard (male and female), Orienteering, Rocketry, PT (male and female), and Marksmanship.

Academic Decathlon I-IV		03221600 - 03221610 - 03380001 - 03380021
Grade: 9-12	Credit: 0.5 – 1	
Prerequisite: Teacher Recommendation		

This is designed to prepare students for competition in Decathlon. Students are required to do independent and team research projects. This course covers ten events/subjects. Literature involves one novel, short stories, poems, and an essay. Students present a four-minute speech and two-minute impromptu speech. Students learn how to interview and be interviewed. The contest also includes social science, economics, mathematics, art, music, and science.

Grade: 9-12

AVID

Credit: 0.5 – 1

The AVID Elective Class. The AVID Elective is the core of AVID Secondary. It targets students in the academic middle with the desire to go to college and the willingness to work hard. Often, AVID Elective students will be the first in their families to attend college, and come from groups traditionally underrepresented in higher education.

 Peer Assistance and Leadership (PALS) 1 and 2

 Grade: 11-12
 Credit: 0.5 – 1

 Prerequisite: Application, interview, teacher recommendation

The PALS course is a peer-helping program in which selected students are trained to work as peer facilitators. Students are trained in a variety of helping skills, which enable them to assist other students to have a more positive and productive school experience. Positive peer influence will be utilized as a central strategy for addressing peer school issues.

# San Jacinto College Dual Credit Courses

# Weighted Dual Credit Courses

High School		College	
Course Code	Course Name	College Course	Course Name
YH330A	U.S. History A	HIST 1301	United States History I
YH330B	U.S. History B	HIST 1302	United States History II
YM5E00	Independent Study in Math 2	MATH 1324	Math for Business and Social Sciences (Finite Math)
YM3D30	Ind Study in Math 3	MATH 1325	Calculus for Business and Social Science
YE4D0A	English IV A	ENGL 1301	Composition I
YE4D0B	English IV B	ENGL 1302	Composition II
YH430G	United States Government	GOVT 2305	Federal Government
YS4M0C	Sci. Research & Design II, Sem. A	GEOL 1303/1103	Physical Geology
	Need Course ID for BIOL Option	BIOL 1308/1108	Biology for Non-Science Majors I
YS4M0D (GEOL)	Sci. Research & Design II, Sem. B	GEOL 1304/1104	Historical Geology
YH4M0E	Economics	ECON 2301	Principles of Macroeconomics
YM3D00	Independent Study in Math 1	MATH 1314	*College Algebra
YS2EOB (BIOL)	Sci. Research & Design II B	BIOL 1307/1107	Biology for Science Majors I
YM3M10	Statistics	MATH 1342	*Elementary Statistical Methods
YS9E0A	Sci. Research & Design III A	BIOL 2301/1101	Anatomy & Physiology I
YS9E0B	Sci. Research & Design III A	BIOL 2302/1102	Anatomy & Physiology II
YS5D0A	Sci. Research & Design I A	CHEM 1305/1105	Introductory Chemistry I
YS5D0A	Sci. Research and Design I B	BIOL 2320/2120	Microbiology for Health Science Majors

	High School		College
Course Code	Course Name	College Course	Course Name
YM4M00	Precalculus	MATH 2412	Precalculus
YC254B	Computer Science II	COSC 1437	Programming Fundamentals II
YM6E00	Independent Study in Math 2	MATH 2413	Calculus I (Summer before senior year)
YS8E0A	Sci. Research & Design III A	PHYS 2325/2125	University Physics I
YS8E0B	Sci. Research & Design III B	PHYS 2326/2126	University Physics II
YS4E0A	Sci. Research & Design A	CHEM 1311/1111	General Chemistry I
YS5E0B	Sci. Research & Design B	CHEM 1312/1112	General Chemistry II
YS2E0A	Sci. Research & Design II A	BIOL 1306/1106	Biology for Science Majors I
YS2E0B	Sci. Research & Design II B	BIOL 1307/1107	Biology for Science Majors II
YF410A	Spanish 4 A	SPAN 1411	Beginning Spanish I
YF410B	Spanish 4 B	SPAN 1412	Beginning Spanish II
YM3D00	Independent Study in Math	MATH 1332	Contemporary Mathematics
YS9E0A	Sci. Research & Design III A	BIOL 2301/2101	Anatomy & Physiology I
YS4D4A	Sci. Research & Design I B	BIOL 2320/2120	Microbiology for Health Science Majors

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# San Jacinto College Dual Credit – Academic Courses

Communications Applicat	ions Dual Credit (San Jacinto College)		03241400
Grade: 11	Credit: 0.5	GPA: 6.0	
This introductory class in Pu speaking situations.	ublic Speaking offers training in principles of Speech Co	mmunication and delivery as well as an introduction to	o various types of
English IV Dual Credit (Sa	n Jacinto College – ENG 1301/1302)		03220400
Grade: 12	Credit: High School and College	GPA: 6.0	
	301 and 1302 at San Jacinto College North. Students responsible for tuition, fees, and books for these c		ster hours of college
Introduction to Philosoph	y Dual Credit (San Jacinto College)		0338002
Grade: 11	Credit: 0.5		
This course provides a gene social and political theory, a	eral overview of the historical development and the maj nd the existence of God.	or systems of the philosophic thought. The nature of n	nan, knowledge, morality,
Introduction to Sociology	Dual Credit (San Jacinto College)		03380032
Grade: 11	Credit: 0.5		
stability and social change a	ntific study of human society, including ways in which g are explored through the application of various theoretic their institutional context may include topics such as so	al perspectives, key concepts, and related research n	nethods of sociology.
Learning Framework Four	ndation of Success Dual Credit (San Jacinto College	e)	03380023
Grade: 11	Credit: 0.5		
research and theory in the p understand the factors that learner. You are ultimately e	PSYC 1300 is to enable you to develop effective acade sychology of learning, cognition, and motivation and ho affect assessment instruments, such as learning invent expected to integrate and apply the learning skills discu develop these skills, you should be able to continually	ow to apply what you learn to becoming successful in ories, to help you identify your own strengths and wea ssed across your own academic courses and program	a college setting. You will knesses as a strategic and become an effective
United States Governmen	t Dual Credit (San Jacinto College)		03330100
Grade: 12	Credit: 1 (0.5 High School; 0.5 is Co	llege) GPA: 6.0	

Students receive 0.5 high school government credit and 3 semester hours of college credit. Participating students are responsible for tuition, fees, and books for this course and must provide own transportation.

# San Jacinto College Dual Credit – Technical Courses

#### Cosmetology I & II (Two Year Program at San Jacinto College)

Grade: 11-12 Credit: 3 per year

Prerequisite: Principles of Human Services AND meet the San Jacinto College entrance requirements

In Cosmetology I, students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.

In Cosmetology II, students review academic knowledge and skills related to cosmetology. This course is designed to provide advanced training for employment in cosmetology careers. Instruction includes advanced training in sterilization and sanitation processes, hair cares, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Students apply, combine, and justify knowledge and skills to a variety of settings and problems.

#### Construction Management Technology I & II (Two Year Program at San Jacinto College)

Grade: 11-12 Credit: 3 per year Prerequisite: Principles of Architecture AND meet the San Jacinto College entrance requirements

Construction managers plan, coordinate, budget and supervise construction projects from early development to completion. The San Jacinto College program focuses on the management of commercial and industrial construction with an emphasis on green construction. This program is designed to prepare students to work in the field of commercial and industrial construction management. Allows students to participate in conceptual development and organization of a construction project, pricing procurement, cost scheduling and the estimating, scheduling, and implementation of the project.

Criminal Justice (San Jacinto College)

Grade: 11-12

Credit: 3 per year Prerequisite: Business Law AND meet the San Jacinto College entrance requirements

This program can prepare students for a variety of exciting and meaningful career - law enforcement, emergency management, homeland security, corrections, probation, parole, even social work. Criminal justice is one of the most popular, fascinating, and fastest growing fields out there. Choose this path and you will be serving society with a chance to make the world a better place.

#### Diesel Technology I & II (San Jacinto College - 2 year program)

Grade: 11-12

Credit: 3 per year

Prerequisite: Principles of Agriculture, Foods & Natural Resources AND meet the San Jacinto College entrance requirements

The world relies on energy, and as we have worked to develop the fuels that drive out way of life, diesel has become more important than ever. This program will help students become key players in this bustling industry. Students learn engine testing and repair, electrical systems, HVAC, power trails, brake systems, safety and much more.

#### Electrical Technology I & II (Two Year Program at San Jacinto College)

Grade: 11-12

Credit: 3 per year Prerequisite: Agricultural Mechanics and Metal Technologies AND meet the San Jacinto College entrance requirements

Students can learn these highly marketable skills in this program. The Houston area is a rapidly expanding metropolis, with constant new residential, commercial, and industrial construction. This program will prepare students for a wide range of career possibilities in all of these areas. Students tackle everything from common household wiring to the complex industrial concepts that power the area's petrochemical plants.

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#### **Emergency Medical Technology (San Jacinto College)**

Credit: 3

Prerequisite: Principles of Health Science, Health Science Theory, and Medical Terminology AND meet the San Jacinto College entrance requirements

This course provides the introduction to the level of Emergency Medical Technician (EMT) - Basic level of emergency care. All the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services are taught. The course includes American Heart Association Healthcare Provider CPR.

Grade: 11-12	Credit: 3 per year

Prerequisite: Principles of Health Science AND meet the San Jacinto College entrance requirements

The medical assisting program is designed to prepare students for careers assisting physicians in the examination and treatment of patients. Medical assistants prepare treatment rooms, inventory supplies and instruments, and prepare patients for the attention of physicians. They hand instruments and materials to physicians as directed. They also schedule appointments, keep medical records, and perform secretarial duties.

#### Pharmacy Technician I & II (San Jacinto College - 2 year program)

Medical Assisting I & II (San Jacinto College – 2 year program)

Grade: 11-12 Credit: 3 per vear

Prerequisite: Principles of Health Science AND meet the San Jacinto College entrance requirements

Credit: 2

The pharmacy technician certificate of technology program provides graduates with the skills and knowledge that will enable them to gualify for entry-level positions in pharmacies as well as prepare them for national certification. The emphasis of the program is on training students to work in retail and hospital pharmacies. The program includes two clinical courses. Students who successfully complete this certificate program will be eligible to take the National Certification Examination for Pharmacy Technicians administered by the Pharmacy Technician Certification Board.

#### Welding Technology I & II (Two Year Program at San Jacinto College)

Grade: 11-12

Grade: 12

Prerequisite: Agricultural Mechanics and Metal Technologies AND meet the San Jacinto College entrance requirements

In Welding Technology I, students will apply knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.

In Welding Technology II, students will apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.

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# University of Texas OnRamps

University of Texas OnRamps – English		UE431A/UE431B
Grade: 12	Credit: 1 (possibility of earning 6 hrs. college credit if all requirements are met)	GPA: 6.0

OnRamps is a dual-enrollment program designed to increase the number and diversity of students who engage in college courses designed by faculty at The University of Texas at Austin and facilitated by high school teachers. During the first semester, the student must complete the coursework and meet the academic requirements to earn college credit.

OnRamps requires a one-time, annual non-refundable fee per student for each course. The fee is due prior to the beginning of the fall semester. The fee includes access to course materials, the learning management system, and technology tools.

0.5 high school credit is awarded for Semester A and 0.5 high school credit is awarded for Semester B. Successful completion of Semester A earns 3 college credits in ENG 1301. Successful completion of Semester B earns 3 college credits in ENG 1302.

University of Texas OnRamps – College Algebra		UM531A/UM531B
Grade: 12	Credit: 1 (possibility of earning 3 hrs. college credit if all requirements are met)	GPA: 6.0

OnRamps is a dual-enrollment program designed to increase the number and diversity of students who engage in college courses designed by faculty at The University of Texas at Austin and facilitated by high school teachers. During the first semester, the student must complete the coursework and meet the academic requirements to earn college credit.

OnRamps requires a one-time, annual non-refundable fee per student for each course. The fee is due prior to the beginning of the fall semester. The fee includes access to course materials, the learning management system, and technology tools.

0.5 high school credit is awarded for Semester A and 0.5 high school credit is awarded for Semester B. Successful completion of Semester A and B earns 3 college credits in MATH 1301.

University of Texas OnRamps – Phy	sics	TE	3D	
Grade: 12	Credit: 1 (possibility of earning 3 hrs. college credit if all requirements are met)	GPA: 6.0		
On Pamps is a dual enrollment program designed to increase the number and diversity of students who engage in college courses designed by faculty at The				

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0.5 high school credit is awarded for Semester A and 0.5 high school credit is awarded for Semester B. Successful completion of Semester A and B earns 3 college credits in TBD.