Waller High School

Course Offerings Descriptions & Career Exploration Information

www.wallerisd.net

Grades 9th-12th

2024-2025

2024 -2025

Waller High School
Course Offerings and Descriptions

Waller Independent School District

Mission Statement

Waller ISD believes that all students will be successful learners and graduate with skills that will allow them to compete in the 21st century workplace. It is therefore the intent of the District to serve all students regardless of their ability, environment, or national origin. Students will be provided opportunities to develop intellectually, physically, and socially through a quality system of teaching and learning. Through these opportunities, students will become responsible and productive members of a constantly changing society and world.

How To Use This Planning Guide

You have a unique opportunity to make some decisions that will influence your future. The planning of your high school program is an important transition in your life. This process does not need to be overwhelming, but it should be taken seriously. Keep in mind that the decisions you make regarding your high school program will affect the rest of your life.

College students change their majors an average of three times, and you will probably change your mind about your career several times. You do need to be aware that each decision you make now will affect the options you will have later. It is better to develop a plan that keeps all of your options open rather than to create one that may limit you later. For that reason, it is important for you to plan as challenging a program as you can. If your career plans change, then it will be easier to move to another program. Although it may appear tempting to create an easier program so that you can enjoy the many activities that happen during your high school career, this may have drastic and negative consequences for you in the long run. You should try to find courses that meet your needs and that prepare you for your potential careers rather than just taking courses that will allow you to graduate. Waller ISD has a wide range of programs designed to prepare students for post-high school experiences: college, business or technical school, military service, fine arts, immediate employment and many others. These programs allow you to choose the one that is best suited to your needs.

On the following pages, you will see the graduation requirements and the graduation plans that are available to you. There is also information relating to career planning that may be helpful. These pages should assist you in personalizing your plan. You will find a description of the courses offered along with any information on prerequisites or grade level placement. A worksheet for your four-year plan will assist you in making sure that you include the necessary courses for the graduation plan you select. Please devote some time and make a serious effort in planning YOUR future.

Students and Parents:

- Review the graduation requirements on page 2. Review records of the high school courses you have already taken.
- Think about your post-secondary education plans and career goals. Decide which college and/or articulated credit opportunities you might want to pursue in high school. For information about:
    - Career preparation courses see pages 60-102.
- Update your Four-Year Graduation Plan as needed.
- Choose courses for next year's schedule that support your Four-Year Graduation Plan and career goals.
- Be sure you have completed the prerequisite requirement for the courses you select.
- Complete your Course Request sheet and turn it in to the Counseling Center

Table of Contents

General Registration Information

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The high school in Waller operates on a semester system on a traditional schedule (seven instructional class periods). One year's work will provide one credit in each course or a maximum total of seven credits per regular school year. Additional credits may be earned in summer school, night school, correspondence, credit-by-exam, or college courses taken for dual credit.

New Students

A high school student new to the school district should provide the registrar's office with the documents listed below:

1. Birth certificate
2. Immunization records as follows: Immunization records from a previous school Or A validated document of immunization by a public health clinic or one signed by a licensed physician.

IMMUNIZATIONREQUIREMENTS

A student shall show acceptable evidence of vaccination prior to entry, attendance, or transfer to a child-care facility or public or private elementary or secondary school in Texas:

Copy of the student's academic record from the previous school

1. A copy of his/her STAAR Confidential Student Report for the most recent test administration (students enrolling from another Texas school)
2. Social Security number
3. Proof of residency in the district (lease agreement, proof of home ownership, etc.)
4. Documentation of participation in any special programs (Special Education, 504, Gifted and Talented, and ESL.)

This chart summarizes the vaccine requirements incorporated in the Texas Administrative Code (TAC), Title 25 Health Services, § § 97.61-97.72. This chart is not intended as a substitute for consulting the TAC, which has other provisions and details. The Department of State Health Services is granted authority to set immunization requirements by the Education Code, Chapter 38, Health & Safety, Subchapter A, General Provisions.

Vaccine Required	**Minimum Number of Doses Required by Grade Level**			**NOTES**
	K-6th	7th	8th - 12th	
Diphtheria/Tetanus/Pertussis (DTaP/DTP/DT/Td/Tdap)[1]	5 doses or 4 doses	3 doses primary series and 1 Tdap/Td booster *within last 5 years*	3 doses primary series and 1 Tdap/Td booster *within last 5 years*	**For K- 6th grade:** 5 doses or diphtheria-tetanus-pertussis vaccine; one dose must have been received on or after the 4th birthday. However, 4 doses meet the requirement if the 4th dose was received on or after the 4th birthday. **For 7th grade:** 1 dose of Tdap is required if at least **5 years** have passed since the last dose of tetanus-diphtheria- containing vaccine. **For 8th – 12th grade:** 1 dose of Tdap is required when **10 years** have passed since the last dose of tetanus-diphtheria- containing vaccine. Td is acceptable in place of Tdap if a medical contraindication to pertussis exists.
Polio[1]	4 doses or 3 doses			**For K – 12th grade:** 4 doses of polio; 1 dose must be received on or after the 4th birthday.1 However, 3 doses meet the requirement if the 3rd dose was received on or after the 4th birthday.1
Measles, Mumps, and Rubella[1,2] (MMR)	2 doses of MMR	2 doses of measles and 1 dose each of rubella and mumps vaccine		The 1st dose of MMR must be received on or after the 1st birthday. For K -6th grade, 2 doses of MMR are required.
Hepatitis B[2]	3 doses			**For students aged 11-15 years**, 2 doses meet the requirement if adult hepatitis B vaccine (Recombivax) was received. Dosage and type of vaccine must be clearly documented. (Two 10 mcg/1.0 ml of Recombivax). If Recombivax was not the vaccine received; a 3-dose series is required.
Varicella[1,2,3]	2 doses			**For K – 12th grade:** 2 doses are required, with the 1st dose received on or after the 1st birthday.1
Meningococcal		1 dose		**For 7th – 12th grade**, 1 dose of quadrivalent meningococcal conjugate vaccine is required on or after the student's 11th birthday. **NOTE:** If a student received the vaccine at 10 years of age, this will satisfy the requirement.
Hepatitis A[1,2]	2 doses			**For K – 12th grade:** 2 doses are required, with the 1st dose received on or after the 1st birthday.[1]

Receipt of the dose up to (and including) 4 days before the birthday will satisfy the school entry immunization requirement. 2 Serologic evidence of infection or serologic confirmation of immunity to measles, mumps, rubella, hepatitis B, hepatitis A, or varicella is acceptable in place of vaccine. 3 Previous illness may be documented with a written statement from a physician, school nurse, or the child's parent or guardian containing wording such as: "This is to verify that (name of student) had varicella disease (chickenpox) on or about (date) and does not need varicella vaccine." This written statement will be acceptable in place of any and all varicella vaccine doses required. Information on exclusions from immunization requirements, provisional enrollment, and acceptable documentation of immunizations may be found in §97.62, §97.66, and §97.68 of the Texas Administrative Code, respectively and online at https://www.dshs.texas.gov/immunize/school/default.shtm.

Exemptions

Texas law allows (a) physicians to write medical exemption statements which clearly state a medical reason exists that the person cannot receive specific vaccines, and (b) parents/guardians to choose an exemption from immunization requirements for reasons of conscience, including a religious belief. The law does not allow parents/guardians to elect an exemption simply because of inconvenience (for example, a record is lost or incomplete and it is too much trouble to go to a physician or clinic to correct the problem). Schools should maintain an up-to-date list of students with exemptions, so they may be excluded in times of emergency or epidemic declared by the commissioner of public health. Instructions for requesting the official exemption affidavit that must be signed by parents/guardians choosing the exemption for reasons of conscience, including a religious belief, can be found at www.dshs.texas.gov/immunize/school/exemptions.aspx . The original Exemption Affidavit must be completed and submitted to the school·

Graduation Requirements- Class of 2024, 2025, 2026 & 2027

(Foundation High School Program with Endorsements requirement for students entering high school in 2014/2015 and after)

All students graduating from Waller High School on the Foundation High School Program with Endorsements must complete 26 units of credit. House Bill 5 sets the end-of-course assessment instruments for secondary-level courses in Algebra I, Biology, English I, English II, and United States History for high school graduation. The purpose of the end-of-course (EOC) assessments are to measure students' academic performance in core high school courses and to become part of the graduation requirements beginning with the freshman class of 2011-2012. Students are enrolled in the Foundation High School Program with Endorsements when entering as a freshman at Waller High School in order to complete graduation requirements for Texas public schools. The appropriate State of Texas Seal designating which plan was completed will be attached to the student's transcript. High school courses taken in junior high will allow students to earn credit toward the 26 credits required for the Foundations High School Program with Endorsements, but junior high grades are not included in student's grade point average (G.P.A.). Credit by exam, distance learning, or correspondence courses can meet credit requirements, but will not be factored into the students G.P.A (Texas Virtual School courses are factored in G.P.A.).

In order to participate in graduation exercises, all 26 credits, as listed below, must be completed with official grades turned in to the registrar's/counselor's office prior to the time of the graduation ceremony and documentation of satisfactory performance on all necessary STAAR/EOC exams as designated by Texas Education Agency.

Discipline	Credits	Foundation Plan with Endorsements *
English	4	English I English II English III 4th Year English Course**
Mathematics	4	Algebra I Geomet ry 3rd Year Mathematics Course** 4th Year Mathematics Course**
Science	4	Biology IPC, Chemistry or Physics 3rd Year Science Course ** 4th Year Science Course**
Social Studies	3	World Geography or World History US History US Government (.5 credit) Economics (.5 credit) Or Personal Financial Literacy and Economics (.5)
Language Other Than English (LOTE)	2	Spanish I, II or French I, II or Computer Science I, II
Fine Arts	1	Music, Art, Theatre, Dance, Choir, or Introduction to Floral Design
Physical Education (or equivalent)	1	Students may substitute the fall semester of marching band, cheerleading, or a full year of AFJROTC, Athletics, Drill Team I or Pre-Drill.
Elective Courses	7	Must be state approved courses and include at least two additional credits in an endorsement area.
Total Credits	26	

*A student may graduate under the Foundation High School Program (22 credits) without earning an Endorsement with proper documentation and parent signature after the sophomore year. ** Refer to the list of eligible courses in the Course Offerings within each subject area

Students shall specify in writing an endorsement the student intends to earn upon entering Grade 9.

Students must earn at least twenty -six (26) credits to earn an endorsement:

- Must demonstrate proficiency for the Foundation High School Program (22 credits)
- An additional credit (1.0) in mathematics
- An additional credit (1.0) in science
- Two (2.0) additional electives that may be selected from the endorsement area.

STEM *Science, Technology, Engineering, & Math*	**Business & Industry**	**Public Services**	**Arts & Humanities**	**Multidisciplinary Studies**
Students may earn a STEM endorsement by selecting and completing the requirements from among the **5** options. **Note:** Algebra II, Chemistry, and Physics are required for the STEM endorsement regardless of the option the student selects from below. **Option 1: CTE** Students earn four (4) CTE credits by taking at least two (2) courses in the same cluster and at least one advanced CTE course. The final course must be in the STEM cluster or advanced manufacturing and machinery (Robotics) program of study. **Option 2:** Computer Science Students take 4 computer science courses. Computer Science AP • Game Programming and Design • Independent Study in Technology Apps	Students may earn a Business & Industry endorsements by selecting and completing the requirements from among these **3** options. **Option 1: CTE** Students earn four (4) CTE credits by taking at least two (2) courses in the same cluster and at least one advanced CTE course. The final course must be in one of the following areas: • Agriculture, Food, and Natural Resources • Architecture and Construction- Electrical Tech and HVAC • Arts, Audio/Video Technology, and Communication & Graphic Design • Business, Marketing & Finance • Hospitality and Tourism • Information Technology • Welding • Career Prep I and II	Students may earn a Public Services endorsement by selecting and completing the requirements from among these **2** options. **Option 1: CTE** Students earn four (4) CTE credits by taking at least two (2) courses in the same cluster and at least one advanced CTE course. The final course must be in one of the following areas: • Education and Training • Health Science • Human Services- Child Guidance & Cosmetology • Law, Public Safety, Corrections, and Security • Career Prep I and II **Option 2: AFJROTC** Students take four (4) courses in AFJROTC.	Students may earn an Arts & Humanities endorsement by selecting and completing the requirements from among these **5** options. **Option 1: Social Studies** Students take five (5) social studies courses for 5 credits. **Option 2: Foreign Language- Same Language** Students take four (4) levels of the same foreign language. **Option 3: Foreign Language- Two Languages** Students take two (2) levels of one foreign language AND two (2) levels of a different foreign language (two levels in each of two different foreign languages for 4 credits). **Option 4: Fine Arts** Students take four (4) courses in one or two fine arts areas for 4 credits.	Students may earn a Multidisciplinary endorsement by selecting and completing the requirements from among these **3** options. **Option 1: Advanced CTE** Students take four advanced courses for four (4) credits that prepare them to enter the workforce or postsecondary education without remediation from within one endorsement area or among endorsement areas not in a coherent sequence. **Option 2: Four by Four (4 X 4)** Students take four (4) courses in each of the four-core content areas. • Four (4) English credits including English IV • Four (4) math credits • Four (4) science credits including biology and chemistry and/or physics • Four (4) social studies credits

STEM *Science, Technology, Engineering, & Math*	**Business & Industry**	**Public Services**	**Arts & Humanities**	**Multidisciplinary Studies**
Option 3: Math Students take Algebra I, Geometry, and Algebra II AND two (2) of the following courses for which Algebra II is a prerequisite. • Pre-Calculus (Pre-Calculus AP) • Calculus AP • Statistics AP • AQR • College Algebra/Trig/Stat **Option 4: Science** Students take Biology, Chemistry, and Physics, AND two (2) of the following courses: • Advanced Animal Science • Advanced Plant and Soil Science • Anatomy & Physiology • AP Physics B • Aquatic Science • Biology AP • Biology DC • Chemistry AP • Earth Systems Science • Environmental Science AP • Environmental Systems • Pathophysiology • Forensic Science • Special Topics in Science • Scientific Research & Design (Biology Dual Credit) **Option 5: Combination** Students take Algebra II, Chemistry, and Physics, AND a coherent sequence of three (3) additional credits from no more than two of the above options.	**Option 2: English** Students take four (4) English elective credits that include three levels in one of the following areas: • Advanced Journalism: Yearbook • Debate **Option 3: Combination** Students take a coherent sequence of four (4) credits from the above options.		**Option 5: English** Students take four (4) English credits selected from the following courses: • English IV • Creative Writing • Humanities • AP English Literature & Composition • AP English Language & Composition • Communication Applications	**Option 3: AP or Dual Credit** Students take four (4) Advanced Placement (AP) or Dual Credit (DC) courses for four (4) credits in English, math, science, social studies, foreign language, or fine arts.

Testing Requirements for Graduation

Students take EOC (End-of-Course) assessments for courses in which they are enrolled as part of their graduation requirement. The five (5) EOC assessments required for graduation are:

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

Students must earn an "approaches grade level" score on each of the five (5) assessments.

**Students who took Algebra I in JH will be required to take the SAT/ACT in high school as a requirement for Federal Accountability.*

HB4545/1416

Texas law requires all students who do not achieve approaches or higher on STAAR grades 3 through 8 or EOC assessments be provided accelerated instruction. These requirements, modified by House Bill 4545 from the 87th legislature and recently updated with the passage of House Bill 1416 in the 88th legislature, provide that qualifying students must be:

• Assigned a TIA designated teacher for the subsequent school year in the applicable subject area;

OR

• Provided supplemental instruction aligned with the research on high impact tutoring in the TEKS for the applicable grade levels and subject area in the following manner:

o No less than 15 or 30 hours depending on student performance and is provided in the summer or at least once per week in the school year;
o Limited to two subjects per year, prioritizing math and RLA;
o Provided in a group of no more than four students, unless the parent or guardian of each student in the group authorizes a larger group;
o Designed to assist the student in achieving satisfactory performance in the applicable grade level and subject area and includes effective instructional materials designed for supplemental instruction;
o Provided by one person with training in the applicable instructional materials for the supplemental instruction and for the entirety of their accelerated instruction, to the greatest extent possible by the LEA.

Other Graduation Requirements

§74.1023. Financial Aid Application Requirement for High School Graduation- Beginning with students enrolled in Grade 12 during 2021-2022, each student in Grade 12 must complete and submit a free application for federal student aid (FAFSA), a Texas application for state aid (TASFA), or submit the TEA provided financial aid application Opt Out Form. Counselors will provide more detailed information to seniors each year.

Speech Requirement

§74.11(a)(3). Speech Requirement Students must demonstrated proficiency, in Grade 8 or higher, as determined by the district in which the student is enrolled, in delivering clear verbal messages; choosing effective nonverbal behaviors; listening for desired results; applying valid critical-thinking and problem-solving processes; and identifying, analyzing, developing, and evaluating communication skills needed for professional and social success in interpersonal situations, group interactions, and personal and professional presentations.

CPR Requirement

§74.38(a)(1-2) Requirements for Instruction in Cardiopulmonary Resuscitation A school district or open-enrollment school shall provide instruction to students in Grades 7-12 in cardiopulmonary resuscitation (CPR). The instruction may be provided as part of any course; and must be provided to each student at least once before graduation from high school.

Proper Interaction with Peace Officer

§74.39. Requirements for Instruction on Proper Interaction with Peace Officers. A school district or open-enrollment charter school shall provide instruction to students in Grades 9-12 on proper interaction with peace officers during traffic stops and other in-person encounters.

Graduation Requirements for Students in Special Education

Graduation requirements for students in special education are determined by the student's admission, review and dismissal (ARD) committee. Special education students will take either the STAAR or STAAR – Alt II as determined by the student's ARD committee.

Individual Graduation Committee

Texas Education Code §28.0258 revises the state's assessment graduation requirements for students enrolled in the 11th or 12th grade during and after the 2014-2015 school year. A student who has failed the EOC assessment graduation requirement for not more than two courses may receive a Texas High school diploma if the student has qualified to graduate by means of an individual graduation committee (IGC) determination.

Performance Acknowledgments

A student may earn a performance acknowledgment for outstanding performance in the areas of:

1. Dual credit;
2. Bilingual / Bi-literacy;
3. College Board Advanced Placement (AP) exams;
4. PSAT, ACT ASPIRE, SAT, or ACT performance; or
5. Nationally or Internationally Recognized Business or Industry Certification or License.

Dual Credit

A student may earn a performance acknowledgment by successfully completing at least 12 hours of college credit taken through dual credit enrollment, advanced technical credit courses, and locally articulated courses with a grade of A or B or earn an Associate Degree.

Bilingual / Bi-literacy

A student may earn a performance acknowledgment by completing all English requirements with a grade of 80+ AND by satisfying 1 of the 4 following additional requirements.

1. Complete 3 credits in the same foreign language with a grade of 80+.
2. Demonstrate proficiency in Level IV or higher in a foreign language with a grade of 80+.
3. Complete 3 credits in any foreign language with a grade of 80+.
4. Demonstrate proficiency in a foreign language through 1 of the 2 following methods.
    - Earn a score of 3 or higher on a foreign language Advanced Placement (AP) exam.
    - Earn performance on a national assessment of language proficiency in a foreign language of at least Intermediate High or equivalent.

An English learner (EL student) must also have participated in and met exit criteria of a bilingual or English as a second language (ESL) program AND scored Advanced High on the Texas English Language Proficiency Assessment System (TELPAS).

College Board Advanced Placement (AP) Exam

A student may earn a performance acknowledgment by earning a score of 3 or above on an Advanced Placement (AP) exam.

PSAT, ACT-Aspire 10, SAT, or ACT Performance

A student may earn a performance acknowledgment by earning a qualifying score on one of the following exams.

1. Earn a score on the PSAT that qualifies the student for recognition as a commended scholar or higher by the College Board and National Merit Scholarship Corporation, as part of the National Hispanic Recognition Program or National Achievement Scholarship Program.
2. Achieve the college readiness benchmark score on at least 2 of the 4 subject tests on the ACT –Aspire 10 exam.
3. Earn a combination critical reading and mathematics score of at least 1250 on the SAT.
4. Earn a composite score on the ACT exam of 28 (excluding the writing sub score).

Nationally or Internationally Recognized Business or Industry Certification or License

Students may earn a performance acknowledgment for earning a nationally or internationally recognized business or industry certification or license.

Nationally or internationally recognized business or industry certification must be endorsed by:

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

Certifications or licensures shall:

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

Distinguished Level of Achievement

A student may earn a distinguished level of achievement by successfully completing the curriculum requirements for the Foundation High School Program and the curriculum requirements for at least one endorsement required by the Texas Education Code (TEC), §28.025(b-15), including four credits in science and four credits in mathematics to include Algebra II.

Waller ISD Endorsement, Program of Study, and Pathway Chart		
Endorsement	**Cluster**	**Program of Study**
STEM	**Science, Technology, Engineering, and Math**	**Programming and Software Design**
		Cybersecurity/Robotics Unmanned Flight
		Math
		Science
Business & Industry	**Ag, Food, and Natural Resources**	**Plant Science**
		Animal Science
		Applied Agricultural Engineering
		Agribusiness
	Architecture and Construction	**Architectural Design**
		Construction/Carpentry **Electric Technology**
	Manufacturing	**Advanced Manufacturing and Machining**
		Welding
	Business, Marketing, and Finance	**Accounting and Financial Services**
		Entrepreneurship
	Arts, AV, and Communications	**Digital Communications**
		Graphic Design and Multimedia
		Journalism
		Speech and Debate
	Hospitality and Tourism	**Culinary Arts**
Public Service	**Health Science**	**Healthcare Diagnostics**
		Healthcare Therapeutic
	Education and Training	**Early Learning**
		Teaching and Training
	Human Services	**Family and Community Services**
		Cosmetology
	Law, Public Safety, and Security	**Law Enforcement**
Arts & Humanities	**Fine Arts**	**Performing Arts**
		Visual Arts
	Social Studies	**History, Geography**
	Languages other than English	**Spanish, French**
	English	**English, Literature**

***Waller High School also offers the Multidisciplinary endorsement which can include courses from various areas.

Course Work

Student Classification

The following shows the credits needed at the beginning of the fall semester for appropriate classification:

Sophomore	6
Junior	12
Senior	19

Students are reclassified three times per year to ensure appropriate grade classification based on course credits. Reclassification will occur:

- 15th school day of the spring semester
- 3rd Monday in July
- 2nd Monday in September

Minimum Course Load

All students are required to enroll in seven instructional classes each semester. EXCEPTIONS:

1. Students enrolled in work-based learning programs must enroll in a minimum of five classes including the work-based learning class.
2. Seniors enrolled in courses that are on track to complete their graduation requirements, have an application on file, and have their own transportation, will have the option of early dismissal and/or late arrival.
3. Fifth year seniors
4. HOPE Academy Students

Working During School Hours

Students may be employed during school hours, only if enrolled in a work-based learning program. Because employment is a required component of the work-based learning, these programs are only open to students who are at least 16 years of age. Work based learning programs are training programs designed to provide occupationally specific training. The training is planned and supervised cooperatively by the school and employers. A student may enter a work-based learning program at the beginning of the school year only. Students are required to work at least 15 hours per week. If not scheduled for a class, the students must be off campus.

Early Dismissal/Late Arrival for High School Work Based Learning or Other Regular Arrangements

A student scheduled for early dismissal must leave the campus within the class change period after their last scheduled class. Any student remaining on campus without authorization and without supervision is subject to disciplinary action.

A student scheduled for Late Arrival should arrive during the class change period prior to their first scheduled class.

For 12th Grade scheduled early dismissal and late arrival, parents and students will be required to sign a statement agreeing that the student will have his/her own transportation and will be on campus only during schedule classes. The student must be enrolled in courses that complete his or her graduation requirements and an approved application on file.

Credits Required for Graduation

All students graduating from Waller High School on the Foundation High School Program with Endorsements must complete 26 credits and meet satisfactory performance on all the specified STAAR/EOC assessments. A student may graduate under the Foundation High School Program (22 credits) without earning an endorsement if, after the student's sophomore year:

1. the student and the student's parent or person standing in parental relation are advised by a school counselor of the specific benefits of graduating from high school with one or more endorsements; and
2. the student's parent or person standing in parental relation files written permission with a school counselor, on a form adopted by the Texas Education Agency (TEA), allowing the student to graduate under the Foundation High School Program without earning an endorsement.

Attendance

State law mandates that "every student must be in attendance for 90% of the semester IN ORDER TO RECEIVE CREDIT."
In the event that a student is denied credit due to absences, the deadline to make up any attendance hours will be the conclusion of the following semester.

Course Selection and Schedule Changes

Students receive information about course offering and advisement about appropriate course selection from the counselors either in late fall or early spring. During that time, students have the opportunity to discuss their course options with parents, teachers, and counselors. Based on input, students may request a change in course selections for the following year until the conclusion of the spring semester. The master schedule and staffing for the following year is built based upon student requests during the spring semester. All requests for changes must be submitted in writing by the last day of the spring semester to the appropriate counselor.

Changes to a schedule or a course may only be made within the published timeframe. After the course change deadline, the following guidelines will be used in honoring changes/requests made after that date.

1. Schedule changes will be made through the first three weeks (first 15 days) of a semester for the following reasons:
    - Error in scheduling on part of school such as a data entry error
    - Course completed/credit earned via summer school, Credit by Exam, Correspondence, etc.
    - Student does not meet prerequisite(s) for the course.
    - Student requests a change into or out of courses with Extracurricular requirements (Athletics, Band, Choir, ROTC, etc.)
    - Student did not meet standard on the STAAR/EOC
    - Level changes from an advanced course to an appropriate regular course with parent approval
2. No schedule changes are allowed after the third week (first 15 days) of each semester. The only exception to this rule is removal from advanced courses within the first grading period. See Exit from Advanced Courses.
3. A student may exit a full year course at the end of the fall semester pending space available in a semester-long course for the spring semester. Requests should be made three weeks before the semester ends.

For questions regarding UIL eligibility and dropped classes, please see the appropriate coach or athletic coordinator.

Acceleration Alternatives

Advanced Placement (AP)

The Advanced Placement Program, administered by the College Board of New York, and taught at Waller High School, allows students to participate in a college level course and possibly earn college credit while still in high school by scoring well on the AP exam. In the program, students are encouraged to take the AP exam in May of each school year, to determine their mastery of the college level course. AP classes are more challenging and stimulating, but they take more time and require more work. AP classes require energetic, involved, and motivated students. The AP courses are taught by high school teachers who use course descriptions that were developed by committees of university professors and experienced AP teachers. The main advantage of taking an AP course is better preparation for college. It has been shown that students master in depth content at the college level more easily after completing AP courses in high school. Students also acquire sophisticated academic skills and increased self-confidence in preparation for college.

Honors courses are also offered to prepare the student who will eventually enroll in AP courses. Honors courses provide a sustained emphasis on promoting the essential academic habits of intellect necessary for success in the College Board Advanced Placement Program.

Entrance/Exit Information for Honors/AP/DC Courses - Waller ISD

Advanced courses have a more rigorous and in-depth content focus than on-level/regular classes. Classes often move at a faster pace, include different types of assignments, and require additional outside reading. These classes are designed to challenge students beyond grade-level academic courses and prepare them for success in future advanced coursework. Students may require additional encouragement and support from both family and campus staff to be successful in advanced classes. Students enrolled in advanced classes in English, Math, Science, LOTE, and Social Studies should have an interest in and an aptitude for the subject. Waller ISD is committed to expanded access in challenging courses and recognizes the value of student participation in advanced courses.

Entrance Information Regarding Advanced Courses

We encourage students who are interested in advanced courses to enroll. The following information provides a profile of a student who typically experiences success in advanced courses:

- Successful completion of prerequisite coursework
- Current or previous successful performance in related area/course
- Demonstrates mastery on course-related state-mandated performance assessments including STAAR
- Students must have parent permission to enroll in advanced courses (signed course selection sheet)
- Teacher recommendation
- Careful consideration of demands of extracurricular activities, employment, community service, outside of school activities, and homework

Exit Information Regarding Advanced Courses

- Students in an Advanced course (Honors, AP, or Dual Credit) will be removed and placed in the appropriate regular course if their grade fails to meet the follow guidelines:
    - Earn below a 65 for the first grading period in a semester course
    - Earn below a 60 for the first grading period in yearlong course
    - Earn below a 65 for the first semester of a yearlong course
- A student may, upon his/her request and with parent approval, transfer from an advanced course to an appropriate regular course, if an appropriate course is available, during the first grading period pending availability in the on-level course. The student will take the previous grade to the new course but will not receive the 5.0 points in the case of Honors, AP or DC courses.
- Due to the special training required of teachers along with the rigor or classroom interaction required of advanced courses, they cannot be taught in an alternative setting long term. Students who are removed from the classroom and placed in a district disciplinary alternative school setting (DAEP) may be removed from the advanced course and placed in the appropriate regular course for the remainder of the semester/year. The student will take the previous grade to the new course but will not receive the 5.0 points in the case of Honors, AP or DC courses. The student will also be dropped from their college course with Blinn College.

Gifted/Talented

Gifted/Talented learners are currently being served through the Advanced Placement/Honors and Dual Credit programs. Parents, teachers, and students may nominate throughout the school year those who exhibit G/T traits, such as advanced vocabulary, critical/creative thinking, and an intense curiosity. Nomination forms are available from the high school counselor or the G/T coordinator. Program exiting may be initiated by the teacher, student, or parent at designated times during the school year. Please call 936-931-3685 for further information.

State Programs Supporting Texas Students

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 and to 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 may specify that students must graduate under the Foundation High School Program with Endorsements as well as the Distinguished Level of Achievement.**

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 any public university in Texas if the students meet the following conditions:

- Apply no later than two years after graduating from high school;
- Submit a completed application prior to filing deadlines set by the college;
- Graduate under the Foundation High School Program with Endorsements as well as the Distinguished Level of

Achievement; and

- 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 (e.g., University of Texas, 6% for the Class of 2025). In some instances, students may be admitted to the university but not to the college of choice within the university. Colleges may admit students on a first-come-first-admitted basis or may use a lottery system.

Texas First Early High School Completion Program and Texas First Scholarship Program (19 TAC Part I, §21.54)

Students graduating one or two semesters early may qualify for a scholarship under the Texas First Diploma program for one or two semesters in participating colleges. Basic requirements are that a student has Texas Residency, completes a FAFSA, must earn at least 22 credits with a 3.0 or higher GPA, completion of the STAAR EOC tests in English 1, English 2, Algebra, Biology, and US History, and demonstrate mastery in each subject area- ELA, math, science, Social Studies, and LOTE. Additional academic requirements, including college readiness test scores are also required. Please see this link for additional program requirements. TEXAS FIRST DIPLOMA FLYER

Texas Leadership Scholarship

Eighteen Texas Colleges are offering full ride scholarships for strong leaders. Check their website for more details.

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

The Texas Grant Program establishes grants to cover tuition and fees to Texas public colleges and universities including community colleges and technical schools for students with financial need who successfully complete the Foundation High School Graduation Program. To be eligible, students must not have been convicted of a felony or crime involving a controlled substance.

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

Texas Educational Opportunity Grant (TEOG)

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 financial needs, enroll in the first thirty hours in college, must register with the Selective Services or be exempt, 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 and may include a tuition rebate program from Texas public universities, the Texas B-On-Time student loan program, a student loan with cancellation program for teachers (Teach for Texas), 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 the school and community by participating in extracurricular activities and community organizations and projects.

General Information

Texas Financial Aid Information Center
Toll free: 1-888-311-8881

THECB Info Line for Loans, Grants & Scholarships
1-800-242-3062

Texas Higher Education Coordinating Board (THECB)
Web Address: www.thecb.state.tx.us

Track sheet and links to other sources
Web Address: www.collegeforalltexans.com

Dual Credit Courses

Dual Credit Courses:

Waller High School offers the dual credit courses in conjunction with The Blinn College System (Blinn College). It is specifically designed for secondary education students who qualify to earn high school and college credit simultaneously while still in high school. Program eligibility is based on the student meeting the eligibility standards. Refer to the chart below to assist in determining exceptional admission. Placement scores that are required by every student in order to be placed in college-level courses are:

Assessment	Math/Algebra	ELA/Reading Skills	Combined/Composite
ACT1	19	19	23
ACT2	22	40	
SAT	530	480	
PSAT/NMSQT3	510	460	
Algebra I EOC3	Minimum score of 4,000 on Algebra I EOC & passing grade in Algebra II		
English II EOC3		Minimum score of 4,000 on English II EOC	

1 ACT administered prior to February 15, 2023; Students must meet both relevant subject and combined/composite score standards
2 ACT administered on or after February 15, 2023
3 The EOC & PSAT waivers only apply for dual credit classes

TSIA 2.0 Administered on or after January 11, 2021	
Math	**ELAR**
CRC 950 **OR** CRC 910-949 & Diagnostic Level 6	CRC 945 & Essay 5-8 **OR** CRC 910-944 & Diagnostic Level 5-6 & Essay 5-8

When deciding which Dual Credit courses to take, make sure you visit the Texas Higher Educating Board's Core Web Center at **http://statecore.its.txstate.edu/** to compare Blinn College courses to the institution you are considering attending. If taking dual credit courses on a Blinn campus for early graduation purposes, you are required to have a letter of permission on file with your counselor prior to registration.

Dual Credit Courses: Class Loads and Grades

Effective as of May 23, 2015, House Bill 505 prohibits the limitations on the number of dual credit courses or hours in which a public high school student may enroll.

The rule does not limit:

1. the number of dual credit courses or hours in which a student may enroll while in high school.
2. the number of dual credit courses or hours in which a student may enroll each semester or academic year; or
3. the grade levels at which a high school student may be eligible to enroll in a dual credit course.

In order to remain in the dual credit program, and continue classes, the student must maintain a 2.0 GPA for fall and spring semesters. If a student drops below a 2.0 for two consecutive semesters, they will be put on scholastic suspension. Because college grades are submitted prior to the end of high school semesters, a student in a dual credit class could have different grades for the college as opposed to the high school. Grades shown in Skyward reflect the high school average only. Refer to the college class syllabus to determine which grades are used for the college average. A grade in the dual credit class becomes part of the high school transcript and the college transcript. These are both part of the student's permanent academic record.

Dual Credit Courses: Textbooks and Tuition

The student must purchase at his/her expense all college level textbooks and pay the fees set by Blinn College. The cost of tuition and fees are per credit hour and the tuition (but not the fees) is waived for dual credit students. Dual Credit Scholarships may be available pending available funds. See the WHS Dual Credit Liaison for more information.

The tentative dual credit courses Waller High School will offer are:

2024– 2025 School Year	**Placement Testing Required**
ENGL 1301 and ENGL 1302 (English III DC)	ELAR & Essay
HIST 1301 and HIST 1302 (US History DC)	ELAR & Essay
ENGL 2322 and ENGL 2323 (English IV DC)	ELAR & Essay
ENGL 1301 and ENGL 1302 (English IV DC)	ELAR & Essay
GOVT 2305 (American Government DC)-Spring	ELAR & Essay
GOVT 2306 (State Government DC)- Spring	ELAR & Essay
MATH 1314 (College Algebra DC)-Fall	Math
MATH 1316 (College Trigonometry DC) or MATH 1342 (Statistics DC)- Spring	Math
BIOL 1406 and BIOL 1407 (Biology DC)	Math, ELAR & Essay
Possible Summer Courses	**Placement Testing Required**
SPCH 1311 (Communication Applications DC) ECON 2301 (Economics DC) MUSI 1306	ELAR & Essay, minimum score not required

Dual Credit Courses: Withdrawals and Refunds

Refunds based on Blinn College school calendar:

- Prior to first calendar day of semester – 100% refund
- During the first 15 calendar days of the semester – 70% refund
- During the 16th through the 20th calendar day of the semester – 25% refund
- After the 20th calendar day of the semester – None

Course Withdrawal:
Withdrawal from a course after the Census Day will result in a mark of "W" on the student's college transcript and no college credit will be awarded. It is the student's responsibility to drop/withdraw before the "W" date by informing the WHS Dual Credit Liaison and then submitting a request to Blinn College for withdrawal from any course. Under Section §51.907 of the Texas Education Code, a student is not permitted to drop more than 6 (six) courses over their college career.

Any questions, please refer to the Blinn College Course Catalog.

Distance Learning /Correspondence Courses

Credit toward state graduation requirement may be granted for correspondence courses only under the following conditions:

- The institution offering the course is The University of Texas at Austin, Texas Tech University, Texas Virtual School or another public institution of higher education approved by the commissioner of education and institute awards credit for the course.
- The correspondence course includes the state required Texas Essential Knowledge and Skills (TEKS) for such a course.

Prior to enrollment in correspondence/distance learning courses, students shall make a written request to the counselor or designee for approval to enroll in the course. If approval is not granted prior to enrollment, the student will not be awarded credit towards graduation. Graduating seniors who are enrolled in correspondence/distance learning courses to earn credits for graduation must receive the grades prior to graduation. Grades earned in correspondence/distance learning courses (except for Texas Virtual School course credit) will not count toward determination of GPA or class rank.

Early Graduation

Students who attend Waller High School may apply to be an early graduate. This means a student will complete all graduation requirements in three or three and half years. Students who choose this option must advise their counselor and submit the application with their counselor before being considered for early graduation. Students must make this declaration by the completion of their freshman year or before the end of fall semester of student's sophomore year. All credits and state testing requirements must be completed before a student is allowed to participate in graduation ceremonies. Early graduates must meet graduation standards set upon entry into high school.

Summer School

High School students (9th-12th grade) may attend summer school to recover credit in failed courses. Registration information for high school students needing to recover credit will be available to students and parents during the spring semester.

A student may choose to attend summer school in a neighboring school district. Every student who attends these classes must have a permission letter from the counselor's office for registration. Students are responsible for requesting a transcript to be sent to WHS if they participate in a program to recover or accelerate credit.

Hope Academy

Waller High School's Hope Academy is a school of choice program serving students in a non-traditional setting who are 'at- risk' and in danger of becoming a drop out. The Hope Academy provides an alternative for students to be successful with flexible scheduling and a self-paced curriculum. Hope Academy is not a disciplinary setting. It is designed for students who are self-motivated, willing to follow rules and require no disciplinary action.

Testing Information

Credit by Exam for Placement/Recovery and Acceleration Credit

Students may take a credit by exam for courses in which they have had previous instruction or wish to accelerate. The students are allowed three hours to complete the exam, and it is similar to taking a final exam at the end of a semester. To award recovery credit, the score on the exam must be 70 or above on a criterion-referenced test. A score of 80 is required for acceleration credit when no previous instruction has been received. Acceleration credit is awarded when the score on the exam is a 3 or higher for College Board Advanced Placement exam or 80% on any other criterion-referenced test approved by the school district. The only board approved credit by exams are offered through Texas Tech University and the University of Texas. Credit by exam scores are not calculated in GPA and do not average with a semester grade for full year credit. Students should consult their counselor if they choose to take a credit by exam for make-up credit. Exams are administered four times a year. A student may not attempt to earn credit by exam for a specific high school course more than two times. If a student fails to earn credit
by examination for a specific high school course before the beginning of the school year in which the student would ordinarily be required to enroll in that course in accordance with the school district's prescribed course sequence, the student must satisfactorily complete the course to receive credit.

State of Texas Assessment of Academic Readiness (STAAR)

In 2007 Senate Bill 1031 was enacted, which called for the development of end-of-course assessment instruments for secondary-level courses. House Bill 5 reduced the testing to the following subjects Algebra I, Biology, English I, English II, and United States History. The purpose of the end-of-course (EOC) assessments is to measure students' academic performance in core high school courses and to become part of the graduation requirements beginning with the freshman class of 2011- 2012.

ACT & SAT

ACT and SAT college entrance exams are recommended to be taken mid-year or early spring semester of the student's junior year. Students should check the college/university admission's deadlines to determine their best test date. Repeat testing can be completed during the senior year if necessary. Most colleges/universities require either ACT or SAT entrance exams for admission. Information and fee waivers concerning SAT and ACT tests may be obtained in the Counseling Center.

ASVAB

ASVAB is a multi-aptitude battery of tests, which helps students to identify their different abilities. The test is given during the fall and spring semesters. The decision to enter college, technical or vocational school, military service, or the civilian world-of-work is an important one. The ASVAB Career Exploration Program may assist students in determining the appropriate course of study based on their abilities. This test is administered to students during the school year on a voluntary basis. Announcements will be made prior to each administration in which students may sign up in the Counseling Center.

PSAT

PSAT is given each school year during the month of October. Students in 10^{th} and 11^{th} grades are encouraged to take this exam that will prepare them to take the SAT. There is a nominal fee for this test. Juniors taking the test may qualify for National Merit Recognition and Scholarships. Announcements will be made prior to the testing date in which students may register for the test and make payments. Fee waivers may be available for 11^{th} grade students.

TSIA2

The TSIA2 Assessment is a college readiness exam that is required for all students who plan to attend a Texas public institution of higher learning. This assessment is designed to help your institution of choice determine college readiness for course work in the general areas of reading, writing and mathematics. There is a nominal fee for this test. This exam must be taken before the student enters the first semester of college or before taking any dual credit courses, unless they are exempted based on ACT or SAT scores, or other tests as designated by the state of Texas.

Special Programs

Special Education

Through Waller Independent School District's Child Find procedures or the campus' Response to Intervention Team (RTI), students experiencing difficulties in school may be referred for services in Special Education. Please contact the Counseling Center for more information. Before a student can receive special education and /or related services for the first time, an initial evaluation must be conducted, and the evaluation must reflect that the student meets eligibility for special education services. Decisions regarding the provision of special education services are made by an Annual, Review, Dismissal (ARD) Committee. A full array of special education services are available to eligible students. These services are designed to support the student's efforts in the Least Restrictive Environment. If a student is determined to be eligible for services in accordance with the Texas Education Agency guidelines, an Individualized Education Program (IEP) is developed. Instructional settings may include (a) general education classroom with designated supports/modifications, (b) general education classroom with support, (c) resource classroom, (d) self-contained classroom or (e) on a separate campus.

For high school students, the IEP serves as the Personal Graduation Plan (PGP) for the purpose of planning courses to meet graduation requirements including endorsement options. Specialized courses which do not appear in this catalog may be available for students with disabilities as determined by the ARD Committee. Program information can be obtained by contacting Waller High School at 936-372-3654 or the Waller ISD Special Education Department at 936-931-9146.

504

Section 504 is a federal law passed by the United States Congress in 1973 with the purpose of prohibiting discrimination against disabled persons. Under Section 504, a student is considered "disabled" if he or she suffers from a physical or mental impairment that substantially limits one or more major life activities. A request for a Section 504 evaluation should be made to the campus §504 Coordinator. Evaluation data will be gathered by the designated campus coordinator. A committee of knowledgeable persons of the student is convened to determine eligibility and a possible service plan. Periodic reviews are held to review and adjust the service plan, if needed. A 3-year periodic re-evaluation is also held to determine continued eligibility for §504 services. For further information, please call 936-372-3654 to speak with the campus 504 Coordinator.

Dyslexia

Waller Independent School District offers a dyslexia program to students who qualify. The intervention should happen early in the student's academic career but may occur whenever it is needed. Students identified as being dyslexic should be given support throughout their academic career. This includes students in all grades. Waller I.S.D. provides a dyslexia intervention program that is conducted by trained dyslexia specialists. No single program is specified for all dyslexic students; rather, services are based upon individual student needs. W.I.S.D. utilizes reading programs for students with dyslexia that incorporates all of the critical, evidence-based components required by 19 TAC §74.28(c). Dyslexia teachers work closely with regular education teachers and special program teachers in order to provide an appropriate education for dyslexic students. Parent/ Guardian permission is required for evaluation, and if eligible, placement into the program.

ESL

English as a Second Language (ESL) is a Waller ISD pull out model approved by TEA and designed for Emergent Bilinguals (EB) who are still acquiring English language proficiency. All courses for ESL students provide instruction based on the Texas Essential Knowledge and Skills (TEKS) and follow the English Language Proficiency Standards (ELPS). The ESL instructional program strives to meet the affective, linguistic, and cognitive needs of EBs [19 TAC Chapter 89.1210(f) (g)].

New Arrival Courses (NAC)

This EB placement provides instructional opportunities for secondary recent immigrant students with little or no English proficiency. These students are newcomers within two years or less in U.S. schools and have scored at the very limited English proficiency level of the state approved English oral language proficiency tests. The courses enable students to become increasingly more proficient in English in all four language domains. It will develop language, survival vocabulary, and the basic building blocks of literacy for newly arrived and preliterate students.

Multi-Tiered System of Support (MTSS)

Multi-Tiered System of Support, or MTSS, is the practice of meeting the academic and behavioral needs of all students through a problem-solving process with three key elements: high quality instruction and research-based interventions aligned with student need, frequent monitoring of student progress, and use of student data in making important educational decisions. As principals, teachers, staff, or parents become aware of a student struggling to meet his/her educational needs, the MTSS campus coordinator is contacted. Following the MTSS guidelines, the campus coordinator organizes a student support team consisting of campus personnel who have knowledge concerning that individual student's academic or behavioral concerns. After gathering pertinent information, the MTSS committee problem solves and recommends a course of action for each individual student. The course of action will vary depending upon the individual student's needs.

Career and Technical Education

Waller ISD offers career and technical education programs in business, management, and administration; agriculture, food, and natural resources; arts, a/v, and communications; law and public safety; human services; manufacturing; hospitality and tourism; architecture and construction; marketing, sales, and services; health science; finance; information technology; and education and training. Admission to these programs is based on student interest, age and grade requirements specified by the Texas Education Agency.

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

Waller ISD will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs.

For information about your rights or grievance procedures, contact the Title IX Coordinator, Bennie Mayes, at 2214 Waller Street, Waller, TX 77484, 936-931-3685 and/or the Section 504 Coordinator, Shawna Kelley at 2214 Waller Street, Waller, TX 77484, 936-931-3685.

Honors/Recognition

Nine Weeks Honor Roll

Students making all A's or all A's and B's during a nine weeks grading period are placed on the Nine Weeks Honor Roll.

Annual Honor Roll

Annual honor roll is determined by your GPA for the current year in all courses. A
Honor Roll – GPA of 3.75 – up
A/B Honor Roll – GPA of 3.50 – 3.74

Top 10%

All eligible students whose grade point averages comprise the top ten percent of the graduating class as determined by the district's procedure to qualify for automatic admission under Education Code 51.803 shall be recognized as honor graduates. See page 17 for more information on top ten percent admissions. Colleges may limit the number of first-time freshmen eligible for admission due to enrollment caps (e.g., University of Texas). A student must also meet the requirements of the Distinguished Level of Achievement to qualify for automatic admissions under the Top 10% Rule.

Honor Graduates

To be eligible for valedictorian or salutatorian honors, a student must have been continuously enrolled in Waller High School for four semesters preceding graduation.

Summa Cum Laude: Top 2 highest-ranking students in graduating class

The following honors are based on the number of students in the graduating class of the given year.
Magna Cum Laude: Top 5% students in graduating class
Cum Laude: Next 10% students in graduating class

Determination of Class Rank

The following provisions shall apply to students entering ninth grade in the school year 1999 and thereafter.

Class ranking is calculated twice yearly following the fall and spring semesters.

Cumulative GPA

Grade Point Average (GPA) is calculated by using only credits earned on the high school campus in the following content areas:

1. English
2. Mathematics
3. Science
4. Social Studies
5. Languages Other Than English

Limitations and Exclusions

Credits earned in the following courses are not used in calculating class rank:

1. Correspondence courses*
2. Distance learning courses*
3. Credit by examination with prior instruction
4. Credit by examination without prior instruction (acceleration)

* Texas Virtual School Course credit is included in grade point average.

Grades for high school credit taken at a junior high or middle school level campus shall not count toward class rank; however, grades earned by eighth grade students in high school courses taken at the high school campus shall count toward class rank.

Courses taken at the college or university campus for college credit ONLY shall not count toward class rank.

*Please refer to the online Waller ISD School Board Policy for actual grade point equivalence. (i.e. 99-1.98 on a 2.0 scale per semester equivalent to the 4.0 scale)

Points for each grade are awarded according to each course weight (AP, Honors, Dual Credit, Regular, etc.)

Letter Grade	Number Grade
A	90-100
B	80-89
C	75-79
D	70-74
F	69 and below

Course Weight

Course type	Weight
AP, Honors, Dual Credit	5.0
Regular	4.0
Below 70 in any course	0.00

Class Rank

2020-2021 school year and prior: Class rank for each senior student shall be calculated by averaging grades earned in grades 9-12 for which the student earned state graduation credit in English, mathematics, science, social studies, and languages other than English (LOTE). The numeric semester average shall earn grade points according to the District's weighted grade point scale. An estimated class rank will be calculated at the end of the fifth six-weeks grading period. The sixth six week estimated average will be calculated based on the fourth and fifth six-week performance. The actual class rank will be determined after all grades are reported on the final transcripts.

2021-2022 school year and after: Class rank for each senior student shall be calculated by averaging grades earned in grades 9-12 for which the student earned state graduation credit in English, mathematics, science, social studies, and languages other than English (LOTE). The numeric semester average shall earn grade points according to the District's weighted grade point scale. An estimated class rank for graduation ceremony only purposes will be calculated at the end of the third nine-week grading period. The estimated class rank for graduation ceremony only purposes will duplicate the third nine-week grading period average for the fourth nine-week grading period average. The actual class rank will be determined after all reported grades are reported on the final transcript.

Ties

In case of a tie, the valedictorian shall be chosen according to the following criteria:

- Computing the weighted grade average to a sufficient number of decimal places until the tie is broken; or
- The student with the most AP courses shall be considered first.
- If a tie still remains, the student with the highest numerical grade of all AP courses taken shall be valedictorian.
- Should a tie still remain for valedictorian, co-valedictorians, shall be declared, and no salutatorian shall be recognized.
- Should a tie develop for salutatorian, all those tying shall be recognized.

Transfer Students

A student who transfers into Waller High School with higher-level course credits shall receive similar credits counted toward the GPA according to the list of higher-level courses offered in Waller ISD and the grade point scale used for credit earned in the District.

Transfer Credit

Students transferring into the District shall receive the numerical grade that was earned in the course at another school. Letter grades shall be recorded as follows:

Conversion Scale	
A	95
B	85
C	77
D	72
F	65

UIL Eligibility Exempt Courses

English I (Honors)
English II (Honors)
English III (AP)
English IV (AP)
Dual Credit English III (1301, 1302)
Dual Credit English IV (2322, 2323)
Geometry (Honors)
Algebra II (Honors)
Pre-Calculus (Honors)
Pre-Calculus (AP)
Calculus (AP)
Statistics (AP)
Dual Credit College Algebra (1314)
Dual Credit Trigonometry (1316)
Dual Credit Statistics (1342)
World Geography (Honors)
Human Geography (AP)
World History (Honors)
World History Modern (AP)
US History (AP)
Government (AP)
Macroeconomics (AP)
European History (AP)
Dual Credit United States History (1301, 1302)
Dual Credit American Government (2305)
Dual Credit State Government (2306)
Psychology (Honors)
Psychology (AP)
Environmental Science (AP)
Biology (Honors) Biology (AP)
Dual Credit Biology (1406, 1407)
Chemistry (Honors) Chemistry (AP)
Physics I (AP)
Physics II (AP)
French III (Honors)
French IV (AP)
Spanish III (Honors)
Spanish IV, V (AP)
Computer Science I (Honors)
Computer Science II (Honors)
Computer Science (AP)
LOTE and Math Computer Science Principles (AP)
Music Theory (AP)
Art History (AP)
Studio Art: 2-D Design (AP)
Communication Applications (DC)

NCAA Information

Core Courses

- NCAA Divisions I and II require 16 core courses. See the information below for the breakdown of this 16 core-course requirement.
- Beginning August 1, 2016, NCAA Division I will require 10 core courses to be completed prior to the seventh semester (seven of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements below). These 10 courses become "locked in" at the start of the seventh semester and cannot be retaken for grade improvement.
- Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course requirement but would not be able to compete.
- Initial-eligibility standards for NCAA Division II college-bound student athletes are changing. College-bound student-athletes first enrolling at an NCAA Division II school on or after August 1, 2018, need to meet new academic rules to practice, compete and receive athletics scholarships during their first year. After August 1, 2018, Division II will use a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements is available at the NCAA Eligibility Center's website (www.eligibilitycenter.org).

Test Scores

- Division I uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements is available at the NCAA Eligibility Center's website (www.eligibilitycenter.org).
- Division II partial qualifier requires a minimum SAT score of 820 or an ACT sum score of 68 and Division II full qualifier requires a minimum SAT score of 840 and an ACT sum score of 70 (see third bullet under Core Courses above).
- The SAT score used for NCAA purposes includes only the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a sum of the following four sections: English, mathematics, reading and science.
- When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.

Grade-Point Average

- Be sure to look at your high school's list of NCAA Courses on the NCAA Eligibility Center's website (www.eligibilitycenter.org). Only courses that appear on your school's list of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- Division I students enrolling full time before August 1, 2016, should use Sliding Scale A to determine eligibility to receive athletics aid, practice and competition during the first year.
- Division I GPA required to receive athletics aid and practice on or after August 1, 2016, is 2.000-2.299 (corresponding test-score requirements are listed on the NCAA Eligibility Center's website- www.eligibilitycenter.org).
- Division I GPA required to be eligible for competition on or after August 1, 2016, is 2.300 (corresponding test score requirements are listed on the NCAA Eligibility Center's website- www.eligibilitycenter.org).
- The Division II core GPA requirement for partial qualifier is a minimum of 2.000 and for full qualifier is a minimum of 2.200 (see third bullet under Core Courses above).
- Remember, the NCAA GPA is calculated using NCAA core courses only.

Division I – 16 Core Courses

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

Division II – 16 Core Courses (On or after August 1, 2020)

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

Nontraditional Courses

Nontraditional courses are classes taught online or through distance learning, independent study, individualized instruction, or correspondence methods.

For a nontraditional course to count as an NCAA core course (per NCAA Bylaw 14.3.1.2.2), it must meet all the following requirements:

1. A student in the course must have regular interaction with the teacher for instruction, evaluation and assistance for the duration of the course. This may include, for example, exchanging emails between the student and teacher, online chats, phone calls, feedback on assignments, and the opportunity for the teacher to engage the student in individual instruction.
2. The course must have a definite time period for completion. For example, it should be clear whether the course is meant to be taken for an entire semester or during a more condensed time period.
3. The course must be clearly identified as nontraditional on students' official high school transcript.

1. A nontraditional course could fail to meet NCAA core-course requirements for any of the following reasons:
2. Does not require regular and ongoing interaction between the student and teacher.
3. Does not have certified or qualified teachers.
4. Does not require students to complete the entire course.
5. Allows students to complete a course in a short period of time.
6. Allows students to take numerous courses at the same time, especially courses in the same subject area or that are sequential.
7. Does not prepare students for four-year college classwork.
8. Does not verify a student's identity.
9. Does not have formal assessments or has only limited assessments.
10. Does not retain student-specific data regarding course completion.

WHS Core Courses Not Approved though NCAA

The following Waller High School courses are <u>not</u> NCAA approved core courses:

- All coursework completed through Edgenuity (HOPE Academy, Night School, Extended Day, Saturday School, Summer School, etc.)
- <u>English</u>
  - Advanced Journalism I, II, III
  - College Readiness & Study Skills
  - Communications Applications DC
  - ESOL I
  - ESOL II
- <u>Math</u>
  - Accounting II
  - Algebraic Reasoning
  - College Preparatory Math
  - Math Models
  - Strategic Learning for High School Mathematics
  - Mathematical Applications in Food and Natural Resources
- <u>Natural/Physical Science</u>
  - Advanced Animal Science
- <u>Social Science</u>
  - Personal Financial Literacy
- <u>Additional Core Courses (Spanish I-V and French I-IV are approved)</u>
  - LOTE Computer Science I, II

Course Offerings

English

4th Year Options for English Credit

The following courses satisfy the 4th year English credit: English IV, English IV AP, English IV DC, Advanced Integrated Reading and Writing (ENGL 0309), Creative Writing, Humanities, Debate III, Communication Applications DC, Communication Applications, and Advanced Journalism III (Yearbook). Make sure you check the pre-requisites for each course.

English I **(E09RG)**
9th **1 credit** **4.0**
Prerequisite: *None*
Course Description: Students will apply previous learned foundational skills of developing and sustaining foundational skills, comprehension, response, multiple genres, author's purpose and craft, composition, and inquiry with greater depth in increasingly complex texts as they work collaboratively and independently to develop and use metacognitive skills. The strands are integrated and progressive so students think critically as readers and writers as they adapt to the ever-evolving nature of language and literacy. Students will engage in academic discourse, writing, and reading on a daily basis with opportunities for cross-curricular content, close reading routines, independent and self-selected reading, and diverse texts.

English I Honors **(E09HN)**
9th **1 credit** **5.0**
Prerequisite: *None*. (Refer to Entrance Information Regarding Advanced Courses)
Course Description: English I Honors courses focus on the same strands as English I on-level (see above), but also emphasize advanced reading, analytical reasoning skills, and writing for the advanced courses, such as Advanced Placement courses in language and literature and Dual Credit English III and IV.

English II **(E10RG)**
10th **1 credit** **4.0**
Prerequisite: *None*
Course Description: Students will apply earlier TEKS strands of developing and sustaining foundational skills, comprehension, response, multiple genres, author's purpose and craft, composition, and inquiry with greater depth in increasingly complex texts as they work collaboratively and independently to develop and use meta-cognitive skills. The strands are integrated and progressive, so students think critically as readers and writers as they adapt to the ever-evolving nature of language and literacy. Students will engage in academic discourse, writing, and reading on a daily basis with opportunities for cross-curricular content, close reading routines, independent and self-selected reading, and diverse texts.

English II Honors **(E10HN)**
10th **1 credit** **5.0**
Prerequisite: *None*. (Refer to Entrance Information Regarding Advanced Courses)
Course Description: English II Honors courses focus on the same strands as English II on-level (see above), but also emphasize advanced reading, analytical reasoning skills, and writing for the advanced courses, such as Advanced Placement courses in language and literature and Dual Credit English III and IV.

English III **(E11RG)**
11th **1 credit** **4.0**
Prerequisite: *None*
Course Description: Students will apply earlier TEKS strands of developing and sustaining foundational skills, comprehension, response, multiple genres, author's purpose and craft, composition, and inquiry with greater depth in increasingly complex texts as they work collaboratively and independently to develop and use meta-cognitive skills. The strands are integrated and progressive so students think critically as readers and writers as they adapt to the ever-evolving nature of language and literacy. Students will engage in academic discourse, writing, and reading on a daily basis with opportunities for cross-curricular content, close reading routines, independent and self-selected reading, and diverse texts.

English III AP- English Language and Composition **(E11AP)**
11th **1 credit** **5.0**
Prerequisite: *Recommended* English II
Course Description: This course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions authors make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects

in nonfiction texts— including images as forms of text—from a range of disciplines and historical periods. This course aligns to an introductory college level rhetoric and writing curriculum and serves as preparation for successful completion of the AP Exam in May. As in the college course, students should be able to read and comprehend college level texts and write grammatically correct, complete sentences.

English III (ENGL 1301 & 1302) Dual Credit **(EN1301)/(EN1302)**
11th **1 credit** **5.0**
Prerequisite: *College eligibility per Blinn College guidelines. ENGL1302 requires successful completion of ENGL 1301*
Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to three (3) hours of college credit for taking this course each semester. ENGL 1301 Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. This writing-intensive first-semester freshman composition course includes (1) study of and practice in all phases of the writing process, both individually and collaboratively, and (2) study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Essays including a 1500-word documented library research-based paper, are required. ENGL 1302: Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry; teamwork; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. This reading and writing intensive prerequisite for sophomore English offerings further develops the analytical, thinking, and research skills underlying academic success through the study of literature. The student's writing of genre-based essays, including researched papers, reinforces the thinking skills associated with interpretation, explication, evaluation, analysis, and synthesis. Essays, including a 1500-2000 word documented library research-based paper, are required.

English IV **(E12RG)**
12th **1 credit** **4.0**
Prerequisite: *None*
Course Description: Students will apply earlier TEKS strands of developing and sustaining foundational skills, comprehension, response, multiple genres, author's purpose and craft, composition, and inquiry with greater depth in increasingly complex texts as they work collaboratively and independently to develop and use metacognitive skills. The strands are integrated and progressive, so students think critically as readers and writers as they adapt to the ever-evolving nature of language and literacy. Students will engage in academic discourse, writing, and reading on a daily basis with opportunities for cross-curricular content, close reading routines, independent and self-selected reading, and diverse texts. ***This course satisfies the 4th year English credit.***

AP English IV - English Literature and Composition **(E12AP)**
12th **1 credit** **5.0**
Prerequisite: *Recommended* English III or AP English Language and Composition
Course Description: The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, and drama), from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure for an audience. As they read, students consider a work's structure, style, and theme, as well as its use of figurative language, imagery, and symbolism. Writing assignments include informational, analytical, and argumentative essays that require students to analyze and interpret literary works. This course aligns to an introductory college-level literature and writing curriculum. As in the college course, students should be able to read and comprehend college-level text and write grammatically correct, complete sentences. ***This course satisfies the 4th year English credit.***

English IV (ENGL 1301 & 1302) Dual Credit **(ENDC01)/(ENDC02)**
12th **1 credit** **5.0**
Prerequisite: *College eligibility per Blinn College guidelines. ENGL1302 requires successful completion of ENGL 1301*
Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to three (3) hours of college credit for taking this course each semester. ENGL 1301: Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. This writing-intensive first-semester freshman composition course includes (1) study of and practice in all phases of the writing process, both individually and collaboratively, and (2) study of and practice in the strategies and techniques for developing

research-based expository and persuasive texts. Essays including a 1500-word documented library research-based paper, are required.
ENGL 1302: Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry; teamwork; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. This reading and writing intensive prerequisite for sophomore English offerings further develops the analytical, thinking, and research skills underlying academic success through the study of literature. The student's writing of genre-based essays, including researched papers, reinforces the thinking skills associated with interpretation, explication, evaluation, analysis, and synthesis. Essays, including a 1500-2000 word documented library research-based paper, are required.

English IV **(E2322 & E2323)**
12th **1 credit** **5.0**
Prerequisite: *Dual Credit ENGL 1301 or ENGL 1302, must meet Blinn College guidelines.*
Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to three (3) hours of college credit for taking this course each semester.
ENGL 2322: A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. This survey introduces students to the principal authors, works, and trends that comprise the canon of British literature from the Anglo-Saxon period through the eighteenth century. Papers are required.
ENGL 2323: A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

College Preparatory Course English Language Arts (ELRA) **(ECPREP)**
12th **1 credit** **4.0**
Prerequisites: *Satisfactory performance on the English I & II STAAR/EOC examinations and successful course completion of English III. Assessment information: 1) an end-of-course assessment instrument does not meet college readiness standards; or 2) coursework, a college entrance examination or an assessment instrument indicates that the student is not ready to perform entry-level college coursework*
Course Description: This course is appropriate for any 12th grade student whose performance on measures outlined in TEC§28.014 indicates that the student is not on track to perform entry-level college coursework in English Language Arts. This course is designed to advance college and career readiness. For the ELAR and Mathematics College Preparatory Courses, a student earning a grade of 70 or above in a particular course will demonstrate proficiency in the course and will be eligible to enroll in an entry-level college level English composition or Mathematics course at Blinn College, up to twenty four (24) months after high school graduation The student must enroll in the student's first college-level course in the exempted content area in the student's first year of enrollment at the IHE. If the student does not earn a grade of "C" or higher in the exempted content area, the student must be tested for the remaining area(s) and comply with all other Success Initiative requirements. Students will learn to investigate academic texts, construct supported interpretations and arguments for an authentic audience, and acquire academic habits of thought. Reading instruction will focus on developing critical reading skills for comprehension, interpretation, and analysis. In writing, students will develop skills through composing with specific purpose, situation, genre, and audience in mind. Students will write a variety of effective formal and informal texts. To learn to integrate reading and writing, students will use an inquiry approach to analyze, synthesize, and make value judgments regarding text and writing. This course is designed to prepare students for college-level reading and writing intensive courses. Successful completion of this course, as defined by the memorandum of understanding (MOU) with the partnering institution(s), grants the student an exemption to TSI requirements for reading and writing at the partnering institution(s). ***This course satisfies the 4th English credit requirement for HS graduation.***

College Readiness & Study Skills **(COLLRE)**
9th–12th **½ credit** **4.0**
Prerequisite: *None*
Course Description: This course provides students with a review of SAT/ACT verbal and math skills, an understanding of the types of questions found on these tests, knowledge of general test-taking strategies, as well as the best specific strategies to use for each type of question. College Readiness also guides students through the steps of the college admissions process including college and career exploration and research, the college application, resume writing, essay writing, and financial aid. ***This course is counted in the GPA as an academic elective.***

Debate I, II, III **(DBAT1)(DBAT2)(DBAT3)**
9th–12th **1 credit** **4.0**
Prerequisite: *None*
Course Description: Students will prepare well-articulated cases on specific debate topics. This course is research based and writing intensive. They will learn how to formulate a case, prepare an argument, and successfully debate an opponent. Some of the skills involved include creating a flow chart, researching, and organizing pertinent information, and staying on topic. Students will be expected to maintain familiarity with current issues and events. If participating on the UIL Debate team, there is required after school practice and students will compete at area tournaments on Fridays and Saturdays. ***This course is counted in the GPA as an academic elective.***

Humanities **(EHUM1)**
11th-12th **1 credit** **4.0**
Prerequisite: *None*
Course Description: Students read widely to understand how various authors craft compositions for various aesthetic purposes. This course includes the study of major historical and cultural movements and their relationship to literature and the other fine arts. This course will allow the students to explore issues involving literature and social sciences. Students will be expected to read, outline, and explore selected texts. Students will research topics in areas such as fine arts, science, geography, poetry, drama, history, and government. The majority of the work will be individual research based. ***This course satisfies the 4th year English credit and is counted in the GPA as an academic elective.***

Journalism I **(JOUPH)**
9th–12th **1 credit** **4.0**
Prerequisite: *None*
Course Description: This course covers general journalism knowledge, with focus on preparation for the production of a class newspaper. Survey portion of the class includes history of journalism in the United States; general guidelines for design, ethics, typography, layout, and photography skills used to produce campus on-line newspaper. ***This course is counted in the GPA as an academic elective.***

Advanced Journalism I, II, and III (Yearbook) **(JRYB1) (JRYB2) (JRYB3)**
10tth– 12th **1 credit** **4.0**
Prerequisite: *None*
Course Description: Advanced Journalism students will work on elements such as theme development, schedules and deadlines, contact with parents on seniors' ads, and other professional level activities. Students in Yearbook I, II, and III will be responsible for the planning and production of the WHS yearbook, The Bulldog. Activities will include rough draft layout, planning of ladder and assignment of pages; acquisition, formatting in Photoshop, and placement of appropriate photographs; copy-writing and caption-writing; editing and proofreading; production of pages; obtaining interviews and factual data on team records, senior goals, etc; meeting deadlines and dispatching final material to publisher; verifying accuracy of and returning in a timely manner of proof sheets; interaction with other students and staff at WHS. Grade criteria will include professional conduct and demeanor when representing Yearbook; organization and teamwork skills; timeliness and accuracy of submissions; willingness to assist other more junior staff members; continued growth in journalism and yearbook production skills. ***Advanced Journalism III satisfies the 4th year English credit. All Advanced Journalism courses count in the GPA.***

Communication Applications **(ComApp)**
9th–12th **½ credit** **4.0**
Prerequisite: *None*
Course Description: Understanding and developing skills in communication are fundamental to all other learning and to all levels of human interaction. For successful participation in professional and social life, students must develop effective communication skills. Rapidly expanding technologies and changing social and corporate systems demand that students send clear verbal messages, choose effective nonverbal behaviors, listen for desired results, and apply valid critical-thinking and problem-solving processes. Students enrolled in Communication Applications will be expected to identify, analyze, develop, and evaluate communication skills needed for professional and social success in interpersonal situations, group interactions, and personal and professional presentations. ***This course is counted in the GPA as an academic elective. This course could count as .5 credit towards a 4th ELA credit towards graduation.***

Communication Applications Dual Credit (SPCH 1311) **(E1315)**
9th – 12th **½ credit**
Prerequisite: College eligibility per Blinn College guidelines
Course Description: SPCH 1311: Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking. **Summer**

Reading I, II, III **(RE180)(RE182)(RE183)**

9th-12th **1 credit** **4.0**

Prerequisite: *None*

Course Description: Reading I, II, III offers students reading instruction to successfully navigate academic demands as well as attain lifelong literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provides students an opportunity to read with competence, confidence, and understanding. Students learn how traditional and electronic texts are organized and how authors choose language for effect. All of these strategies are applied at an instructional level and independent level. ***This course is counted in the GPA as an academic elective.***

ESOL I and ESOL II **(ESOL1)(ESOL2)**

9th – 12th **1 credit** **4.0**

Prerequisite: *LPAC Placement/Recommendation/Recommended corequisite English Language Development and Acquisition (ELDA)*

Course Description: This course may substitute for English I/II credits for students who are new to the country and whose English proficiency is at the beginner or intermediate level. ESOL I/II learning expectations are the same as those of English I/II with the addition of instruction that is accommodated to meet the needs of students who are at the beginner or intermediate stage of English language acquisition. Emphasis is placed on vocabulary expansion, written and oral communication and reading comprehension to accelerate social and academic English language acquisition. ESOL I/II is taught through sheltered instruction methods for teaching proficiency in listening, speaking, reading, and writing in English as well as content knowledge.

Practical Writing Skills **(EPWARG)**

9th–12th **4.0**

Prerequisite*:* *LPAC Recommendation/Placement* **1 credit**

Course Description: 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. ***This course is counted in the GPA as an academic elective.***

Creative Writing **(ECIW1)**

9th– 12th **1 credit** **4.0**

Prerequisite: *LPAC Recommendation/Placement*

Course Description: The study of creative writing allows high school students to earn one-half to one credit while developing versatility as a writer. Creative and Imaginative Writing, a rigorous composition course, asks high school students to demonstrate their skill in such forms of writing as essays, short stories, poetry, and drama. All students are expected to demonstrate an understanding of the recursive nature of the writing process, effectively applying the conventions of usage and the mechanics of written English. The student's evaluation of his/her own writing as well as the writing of others ensures that students completing this course are able to analyze and discuss published and unpublished pieces of writing, develop and apply criteria for effective writing, and set their own goals as writers. ***This course satisfies the 4th year English credit***.

English Language and Acquisition 1 & 2 **(ELDA1)/(ELDA2)**

9th-12th **1 credit** **4.0**

Prerequisite: *concurrent enrollment with corequisite ESOL1 or ESOL2*

Course Description: This course must be taken concurrently with a corequisite language arts course as outlined in Chapter 110 of this title (relating to Texas Essential Knowledge and Skills for English Language Arts and Reading or this chapter. ***This course is counted in the GPA as an academic elective.***

MATHEMATICS

Algebra I, Geometry, and two additional math courses are required for students on the Foundation High School Program with an Endorsement.

3rd Year Options for Math Credit

Math Models with Applications, Algebraic Reasoning, Algebra II, Algebra II Honors, Advanced Quantitative Reasoning, Pre-Calculus, Pre-Calculus Honors, Pre-Calculus AP, Statistics, Calculus AP, College Algebra DC, College Trigonometry DC, College Statistics DC, Computer Science AP, Accounting II, Statistics AP, Mathematical Applications in Agriculture, Food, and Natural Resources, and Robotics II. Make sure you check the pre-requisites for each course.

4th Year Options for Math Credit

Algebraic Reasoning, Algebra II, Algebra II Honors, Advanced Quantitative Reasoning, Pre-Calculus, Pre-Calculus Honors, Pre-Calculus AP, Statistics, Calculus AP, College Algebra DC, College Trigonometry DC, College Statistics DC, College Prep Math, Computer Science AP, Accounting II, Statistics AP, and Robotics II. Make sure you check the pre-requisites for each course.

Algebra 1 **(MALG1)**
9th **1 credit** **4.0**

Prerequisites: *Required* Mathematics grade 8 or its equivalent

Course Description: In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations. All ninth-grade students who did not take Algebra I in the eighth grade will enroll in this course. ***Algebra I is a required math course for all students. Algebra I is a pre-requisite for all other math courses. Students that fail Algebra I will be required to attend mandatory Summer School the following summer to make up the Algebra I credit. Students who took Algebra I in JH will be required to take the SAT/ACT in high school as a requirement for Federal Accountability.***

Geometry **(MGEOM)**
9th – 10th **1 credit** **4.0**

Prerequisites: *Required* Algebra I (Per SB 1374, a student may enroll concurrently in Algebra I and Geometry)

Course Description: In Geometry, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Within the course, students will begin to focus on more precise terminology, symbolic representations, and the development of proofs. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry strand. In the logical arguments and constructions strand, students are expected to create formal constructions using a straight edge and compass. In proof and congruence, students will use deductive reasoning to justify, prove and apply theorems about geometric figures. Proportionality is the unifying component of the similarity, proof, and trigonometry strand. Students will use their proportional reasoning skills to prove and apply theorems and solve problems in this strand. The two- and three-dimensional figure strand focuses on the application of formulas in multi-step situations since students have developed background knowledge in two- and three- dimensional figures. Using patterns to identify geometric properties, students will apply theorems about circles to determine relationships between special segments and angles in circles. ***Geometry or Geometry Honors is a required math course for all students.***

Geometry Honors **(MGEOHN)**
9th – 10th **1 credit** **5.0**

Prerequisites: *Required* Algebra I

Course Description: In Geometry, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Within the course, students will begin to focus on more precise terminology, symbolic representations, and the development of proofs. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry strand. In the logical arguments and constructions strand, students are expected to create formal constructions using a straight edge and compass. In proof and congruence, students will use deductive reasoning to justify, prove and apply theorems about geometric figures. Proportionality is the unifying component of the similarity, proof, and trigonometry strand. Students will use their proportional reasoning skills to prove and apply theorems and solve problems in this strand. The two-

and three-dimensional figure strand focuses on the application of formulas in multi-step situations since students have developed background knowledge in two- and three- dimensional figures. Using patterns to identify geometric properties, students will apply theorems about circles to determine relationships between special segments and angles in circles. Higher level and critical thinking skills addressed by providing opportunities for discovery and more detailed proof writing. The level of instruction/curriculum will focus on preparing the student for Advanced Placement courses. ***Geometry or Geometry Honors is a required math course for all students.***

Mathematical Models with Applications **(MMTMA)**
10th-12th **1 credit** **4.0**
Prerequisites: *Required* Algebra I
Course Description: Mathematical Models with Applications is designed to build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. This mathematics course provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions. Students will select from tools such as physical objects; manipulatives; technology, including graphing calculators, data collection devices, and computers; and paper and pencil and from methods such as algebraic techniques, geometric reasoning, patterns, and mental math to solve problems. ***This course satisfies the 3rd year Mathematics credit.***

Algebraic Reasoning **(MALGRE)**
10th-12th **1 credit** **4.0**
Prerequisites: *Required* Algebra I
Course Description: In Algebraic Reasoning, 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 broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these 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 such as probes, measurement tools, and software tools, including spreadsheets. ***This course satisfies the 3rd or 4th year Mathematics credit.***

Mathematical Applications in Agriculture, Food, and Natural Resources **(CTAGMT)**
10th-12th **1 credit** **4.0**
Prerequisite: *Required* Algebra I. *Recommended* one credit Ag, Food, & Natural Resources Program of Study
Course Description: 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. This course satisfies the 3rd or 4th year math credit and is counted in the GPA as an academic elective. ***This course satisfies the 3rd year Mathematics credit.***

Algebra II **(MALG2)**
10th – 12th **1 credit** **4.0**
Prerequisites: *Required* Algebra I
Course Description: In Algebra II, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods. Students will use technology to build understanding and make connections. It is highly recommended that students have access to a graphing tool, either a calculator or an online option, to work with on a daily basis. ***To graduate on the Distinguished Level of Achievement and to also be eligible for top 10% automatic college acceptance, the student must take Algebra II. This course satisfies the 3rd or 4th year Mathematics credit.***

Algebra II Honors **(MAL2HN)**
10th-12th **1 credit** **5.0**
Prerequisites: *Required* Algebra I
Course Description: Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods. Students will use technology to build understanding and make connections. It is highly recommended that students have access to a graphing tool, either a calculator or

an online option, to work with on a daily basis. ***To graduate on the Distinguished Level of Achievement and to also be eligible for top 10% automatic college acceptance, the student must take Algebra II. This course satisfies the 3rd or 4th year Mathematics credit.***

Advanced Quantitative Reasoning (AQR) **(MTAQR)**
11th – 12th **1 credit** **4.0**
Prerequisite: *Required* Algebra, Geometry, Algebra II
Course Description: In Advanced Quantitative Reasoning, students will develop and apply skills necessary for college, careers, and life. Course content consists primarily of applications of high school mathematics concepts to prepare students to become well-educated and highly informed 21st century citizens. Students will develop and apply reasoning, planning, and communication to make decisions and solve problems in applied situations involving numerical reasoning, probability, statistical analysis, finance, mathematical selection, and modeling with algebra, geometry, trigonometry, and discrete mathematics. ***This course satisfies the 3rd or 4th year Mathematics credit.***

Pre-Calculus **(MPRCL)**
11th – 12th **1 credit** **4.0**
Prerequisite: *Required* Algebra I, Geometry, and Algebra II
Course Description: Pre-Calculus is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Pre-Calculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems. It is highly recommended that students have access to a graphing tool, either a calculator or an online option, to work with on a daily basis. ***This course satisfies the 3rd or 4th year Mathematics credit.***

Pre-Calculus Honors **(MPCHN)**
11th-12th **1 credit** **5.0**
Prerequisite: *Required* Algebra I, Geometry, and Algebra II
Course Description: Pre-Calculus is the preparation for calculus. The course is function based specifically investigating exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise defined functions, including step functions. Students systematically work with functions and their multiple representations. The study of Pre-Calculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems. It is highly recommended that students have access to a graphing tool, either a calculator or an online option, to work with on a daily basis. ***This course satisfies the 3rd or 4th year Mathematics credit.***

Pre-Calculus AP **(MPCAP)**
11th-12th **1 credit** **5.0**
Prerequisite: *Recommended* Algebra I, Geometry, and Algebra II
Course Description: Pre-Calculus is the preparation for Calculus. In AP Precalculus, students will examine functions through multiple representations. Students will apply the mathematical tools they acquire in real-world modeling situations. By examining scenarios, conditions, and data sets and determining and validating an appropriate function model, students gain a deeper understanding of the nature and behavior of each function type. At the conclusion of this course, students may take the Advanced Placement Pre-Calculus Exam which provides students the opportunity to earn college credit. ***This course satisfies the 3rd or 4th year Mathematics credit.***

Statistics **(MSTAT)**
10th – 12th **1 credit** **4.0**
Prerequisite: *Required* Algebra I
Course Description: In Statistics, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of variability and statistical processes. Students will study sampling and experimentation, categorical and quantitative data, probability and random variables, inference, and bivariate data. Students will connect data and statistical processes to real-world situations. In addition, students will extend their knowledge of data analysis. ***This course satisfies the 3rd or 4th year Mathematics credit.***

AP Statistics **(MSTAP)**
11th – 12th **1 credit** **5.0**
Prerequisite: *Recommended* Algebra II and Geometry (Refer to Entrance Information Regarding Advanced Courses)
Course Description: This is an Advanced Placement course designed to meet the requirements of statistics as outlined in the Course Description of the Advanced Placement Program in Mathematics. 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, planning a study, anticipating patterns, and statistical inference. Students will use technology to build understanding and make connections. It is highly recommended that students have access to a graphing tool, either a calculator or an online option, to work with on a daily basis. At the conclusion of this course, students may take the Advanced Placement Calculus Exam which provides students the opportunity to earn college credit. ***This course satisfies the 3rd or 4th year Mathematics credit.***

AP Calculus (AB) **(MCLAP)**
11th-12th **1 credit** **5.0**
Prerequisite: *Recommended* Pre-Calculus. (Refer to Entrance Information Regarding Advanced Courses)
Course Description: Advanced Placement Calculus is a course designed to meet the requirements of Calculus AB as outlined in the Course Description of the Advanced Placement Program in Mathematics. This course primarily develops the students' understanding of the concepts of calculus and provides experience with its methods and applications. Topics include limits, derivatives, integrals, and their applications. At the conclusion of this course, students may take the Advanced Placement Calculus Exam which provides students the opportunity to earn college credit. Graphing calculators will be extensively integrated in the coursework. It is highly recommended that students have access to a graphing tool, either a calculator or an online option, to work with on a daily basis. ***This course satisfies the 3rd or 4th year Mathematics credit.***

College Algebra (MATH 1314) Dual Credit **(MADC1)**
11h – 12th **½ credit** **5.0**
Prerequisite: *Required* Algebra I, Geometry and Algebra II; College eligibility per Blinn College guidelines
Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to three (3) hours of college credit for taking this course each semester. MATH 1314 College Algebra: In-depth study and applications 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. ***This course satisfies the 3rd or 4th year Mathematics credit.*** **Fall**

College Trigonometry (MATH 1316) Dual Credit **(MADC2)**
11h – 12th **½ credit** **5.0**
Prerequisite: *Required* Algebra I, Geometry and Algebra II; College eligibility per Blinn College guidelines
Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to three (3) hours of college credit for taking this course each semester. MATH 1316 (Trigonometry): In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. ***This course satisfies the 3rd or 4th year of Mathematics credit.*** **Spring**

Statistics (MATH 1342) Dual Credit **(MASTDC)**
11th – 12th **½ credit** **5.0**
Prerequisite: *Required* Algebra I, Geometry and Algebra II; College eligibility per Blinn College guidelines
Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to three (3) hours of college credit for taking this course each semester. MATH 1342 (Statistics): Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. ***This course satisfies the 3rd or 4thyear Mathematics credit.*** **Spring**

College Prep Math **(MCPREP)**
11th-12th **1 credit** **4.0**
Prerequisites: *Assessment information: 1) an end-of-course assessment instrument does not meet college readiness standards; or 2) coursework, a college entrance examination or an assessment instrument indicates that the student is not ready to perform entry-level college coursework.*
Course Description: Target students are those students failing to meet the college readiness standard as defined by House Bill 5, particularly students who did not take Algebra II or did not maintain a C average in Algebra II. For the ELAR and Mathematics College Preparatory Courses, a student earning a grade of 70 or above in a particular course will demonstrate proficiency in the course and will be eligible to enroll in an entry-level college level English composition or Mathematics course at Blinn College, up to twenty four (24) months after high school graduation The student must enroll in the student's first college-level course in the exempted content area in the student's first year of enrollment at the IHE. If the student does not earn a grade of "C" or higher in the exempted content area, the student must be tested for the remaining area(s) and comply with all other Success Initiative requirements. Intermediate Algebra is the study of factoring rules, rational expressions, rational exponents, radicals, complex numbers, inequalities, inequalities containing

absolute values, quadratic equations, linear equations, and equations with radicals, rational expressions, exponents, and functions. Calculator use is not recommended for this course (including the department final examination) as calculators are not allowed in classes when taught on campus. An average of C or better indicates the student has met the Blinn College criteria for Math 0312, and the student is prepared for Blinn College Math 1314, College Algebra, without further assessment remediation. ***This course satisfies the 4th year Mathematics credit***.

Computer Science AP A-LOTE (Languages Other Than English) and Math **(TACSAP)(TACSAL)**
11th & 12th **2 credits** **5.0**
Prerequisite: *Recommended* Algebra II and Computer Science I
Course Description: Students continue the study of software design, writing well-designed well-structured computer programs that solve problems in the fields of Math and Science. Students will work in the Java programming language as the focus on the design and structure of Java classes. Students will also be introduced to advanced topics like Binary Trees, Graph Theory, and Digital Electronics. Students will prepare for the Computer Science Advanced Placement Exam. ***This course satisfies the 3rd or 4th year Mathematics credit as well as a LOTE credit for graduation.*** This course provides an opportunity to earn college credit upon completion of AP exam and receiving a satisfactory score. Students must co-enroll in Computer Science AP Math and LOTE.

Strategic Learning for High School Mathematics **(MSTRAL)**
9th – 10th **½ or 1 credit** **4.0**
Prerequisite: *Placement Only*
Course Description: Course intended to create strategic mathematical learners from students with mathematical gaps in learning. The basic understandings will stimulate students to think about their approach to mathematical learning. The essential knowledge and skills will foster a deeper understanding of the task of learning mathematical concepts**.** ***This course is counted in the GPA as an academic elective.***

Accounting II
See Accounting on page 81. This course satisfies the 3rd or 4th Mathematics credit.

Robotics II
See Robotics II on page 98. This course satisfies the 3rd or 4th Mathematics credit.

SCIENCE

2nd Year Options for Science Credit

Integrated Physics/Chemistry (IPC), Chemistry, Chemistry Honors, Physics, and AP Physics 1. Make sure you check the pre- requisites for each course.

3rd or 4th Year Options for Science Credit

AP Biology, Dual Credit Biology, Chemistry, Chemistry Honors, AP Chemistry, AP Environmental Science, AP Physics I, AP Physics II, Aquatic Science, Earth Systems Science, Environmental Systems, Anatomy/Physiology, Advanced Animal Science, Advanced Plant and Soil Science, Forensics, Pathophysiology. Make sure you check the prerequisites for each course.

Biology **(SBLRG)**
9th – 11th **1 credit** **4.0**
Prerequisite*: None*
Course Description: Students in Biology focus on patterns, processes, and relationships of living organisms through four main concepts: biological structures, functions, and processes; mechanisms of genetics; biological evolution; and interdependence within environmental systems. Students are expected to gain sufficient knowledge of the scientific and engineering practices to make informed decisions using critical thinking and scientific problem solving. Students may be required to conduct dissections.

Biology Honors **(SBLHN)**
9th – 11th **1 credit** **5.0**
Prerequisite: *None*. (Refer to Entrance Information Regarding Advanced Courses)
Course Description: Students in Honors Biology focus on patterns, processes, and relationships of living organisms through four main concepts: biological structures, functions, and processes; mechanisms of genetics; biological evolution; and interdependence within environmental systems. Students are expected to gain sufficient knowledge of the scientific and engineering practices to make informed decisions using critical thinking and scientific problem solving. This course is designed to prepare students who are planning to follow the AP track as part of their educational goals, in addition to the expectations of the regular level Biology course. This course is designed to highly increase the amount of rigor and expectations of the individual Biology student. Students need to be highly self-motivated and have high self-expectations of their coursework. Investigations, both individual and group, are integral components of the Honors curriculum and may be performed both inside and/or outside of class. Students may also be required to conduct dissections.

Integrated Physics/Chemistry **(SINPC)**
9th-10th **1 credit** **4.0**
Prerequisite: *None*
Course Description: In Integrated Physics and Chemistry, students conduct laboratory and field investigations, use engineering practices, use scientific practices during investigation, and make informed decisions using critical thinking and scientific problem solving. This course integrates the disciplines of physics and chemistry in the following topics: force, motion, energy, and matter. ***This course satisfies the 2nd year Science credit***.

Chemistry **(SCHRG)**
10th-12th **1 credit** **4.0**
Prerequisite: *Required* one unit of high school science and Algebra I; *Recommended* completion of or concurrent enrollment in second year of math
Course Description. In Chemistry, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our daily lives. By the end of Grade 12, students are expected to gain sufficient knowledge of the scientific and engineering practices across the disciplines of science to make informed decisions using critical thinking and scientific problem solving. ***This course satisfies the 2nd, 3rd, or 4th year Science credit.***

Chemistry Honors **(SCHHN)**
10th-12th **1 credit** **5.0**
Prerequisite: *Required* one unit of high school science and Algebra I; *Recommended* completion of or concurrent enrollment in second year of math. (Refer to Entrance Information Regarding Advanced Courses).
Course Description: In Chemistry, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our

daily lives. By the end of Grade 12, students are expected to gain sufficient knowledge of the scientific and engineering practices across the disciplines of science to make informed decisions using critical thinking and scientific problem solving. ***This course satisfies the 2nd, 3rd, or 4th year Science credit.***

Physics **(SPHYS)**
9th – 12th **1 credit** **4.0**
Prerequisite: *Recommended* Algebra I or concurrent enrollment in Algebra I
Course Description: In Physics, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: laws of motion; changes within physical systems and conservation of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. Students who successfully complete Physics will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation. By the end of Grade 12, students are expected to gain sufficient knowledge of the scientific and engineering practices across the disciplines of science to make informed decisions using critical thinking and scientific problem solving**. *This course satisfies the 2nd, 3rd, or 4th year Science credit.***

AP Physics I **(SPHAP)**
10th-12th **1 credit** **5.0**
Prerequisite: *Recommended* Algebra 1 and Geometry (refer to Entrance Information regarding Advanced Courses)
Course Description: AP Physics is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves. AP Physics 1 is a full-year course that is the equivalent of a first-semester introductory college course based in algebra-based physics***. This course satisfies the 2nd, 3rd, or 4th year Science credit.***

AP Physics II **(SPHAP2)**
11th-12th **1 credit** **5.0**
Prerequisite: *Recommended* AP Physics I, *recommended* co-requisite Pre-Calculus (Refer to Entrance Information regarding Advanced Courses)
Course Description: AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids, thermodynamics, electrical force, field, potential, electric circuits, magnetism and electromagnetic induction, geometric and physical optics, and quantum, atomic and nuclear physics. AP Physics 2 is a full-year course that is the equivalent of a second-semester introductory college course in algebra-based physics. ***This course satisfies the 3rd or 4th Science credit.***

Advanced Animal Science **(CTAAAS)**
11th-12th **1 credit** **4.0**
Prerequisite: *Required* Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production; *Recommended* Veterinary Medical Applications.
Course Description: 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 relating 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. To receive credit in Science, students must meet the 40% laboratory and fieldwork requirement. ***This course satisfies the 3rd or 4th year Science credit.***

Advanced Plant and Soil Science **(CTAAPS)**
11th-12th **1 credit** **4.0**
Prerequisite: *Recommended* Biology, Integrated Physics and Chemistry (IPC), Chemistry, or Physics and a minimum of one credit from the courses in the Agriculture, Food, and Natural Resources Program of Study.
Course Description: 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. ***This course satisfies the 3rd or 4th Science credit.***

Anatomy and Physiology **(CTAPR)**

10th – 12th **1 credit** **4.0**

Prerequisite: *Required* Biology and a second science credit; *Recommended* a course from the Health Science Program of Study

Course Description: The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis. ***This course satisfies the 3rd or 4th year Science credit.***

AP Environmental Science **(SAPESA)**

11th - 12th **1 credit** **5.0**

prerequisite: *Recommended* Algebra I and two years of high school laboratory science including one year of life science and one year of physical science. (Refer to Entrance Information Regarding Advanced Courses)

Course Description: The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. ***This course satisfies the 3rd or 4th year Science credit.***

AP Chemistry **(SCHAP)**

11th-12th **1 credit** **5.0**

Prerequisite: *Recommended* Chemistry and Algebra II. (Refer to Entrance Information Regarding Advanced Courses)

Course Description: The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. ***This course satisfies the 3rd or 4th year Science credit.***

Aquatic Science **(SAQUS)**

10th-12th **1 credit** **4.0**

Prerequisite: *Required* Biology *Recommended* IPC, Chemistry, or concurrent enrollment in either**.**

Course Description: In Aquatic Science, students study the interactions of biotic and abiotic components in aquatic environments, including impacts on aquatic systems. Investigations and field work in this course may emphasize fresh water or marine aspects of aquatic science depending primarily upon the natural resources available for study near the school. Students who successfully complete Aquatic Science will acquire knowledge about a variety of aquatic systems, conduct investigations and observations of aquatic environments, work collaboratively with peers, and develop critical-thinking and problem-solving skills. ***This course satisfies the 3rd or 4th year Science credit.***

AP Biology **(SBLAP)**

11th – 12th **1 credit** **5.0**

Prerequisite: *Recommended* Biology and Chemistry. (Refer to Entrance Information Regarding Advanced Courses)

Course Description: AP Biology course is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. The AP Biology course is equivalent to a two-semester college introductory biology course for biology majors. ***This course satisfies the 3rd or 4th year Science credit.***

Biology Dual Credit (BIOL 1406 & 1407)- Scientific Research & Design **(SB1406)(SB1407)**

11th – 12th **1 credit** **5.0**

Prerequisite: College eligibility per Blinn College guidelines

Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to four (4) hours of college credit for taking this course each semester.

BIOL 1406: Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab activities reinforce lecture topics. **Fall**

BIOL 1407: The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab activities reinforce lecture topics. **Spring.**

Due to the number of instructional minutes required by Blinn College for this course, students are required to attend the instructional period and the advisory period. This course satisfies the 3rd or 4th year Science credit.

Earth Systems Science (Pending Board approval) **(SESS)**
11th -12th **1 credit** **4.0**

Prerequisite: *Required Algebra and two credits of high school Science*

Course Description: The Earth Systems Science course is designed to build on students' prior scientific and academic knowledge and skills to develop their understanding of Earth's systems. These systems (the atmosphere, hydrosphere, geosphere, and biosphere) interact through time to produce the Earth's landscapes, climate, and resources. Students explore the geologic history of individual dynamic systems through the flow of energy and matter, their current states, and how these systems affect and are affected by human use**. *This course satisfies the 3rd or 4th year Science credit.***

Environmental Systems **(SEN12)**
11th-12th **1 credit** **4.0**

Prerequisite: *Recommended* one unit of high school life science and one unit of high school physical science

Course Description: In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources, and flow of energy through an environmental system, relationship between carrying capacity and changes in populations and ecosystems, natural changes in the environment, and human activities that impact the natural environment. ***This course satisfies the 3rd or 4th year Science credit.***

Pathophysiology **(CTPATH)**
11th - 12th **1 credit** **4.0**

Prerequisite: *Required* Biology and Chemistry; *Recommended* a course from the Health Science Program of Study

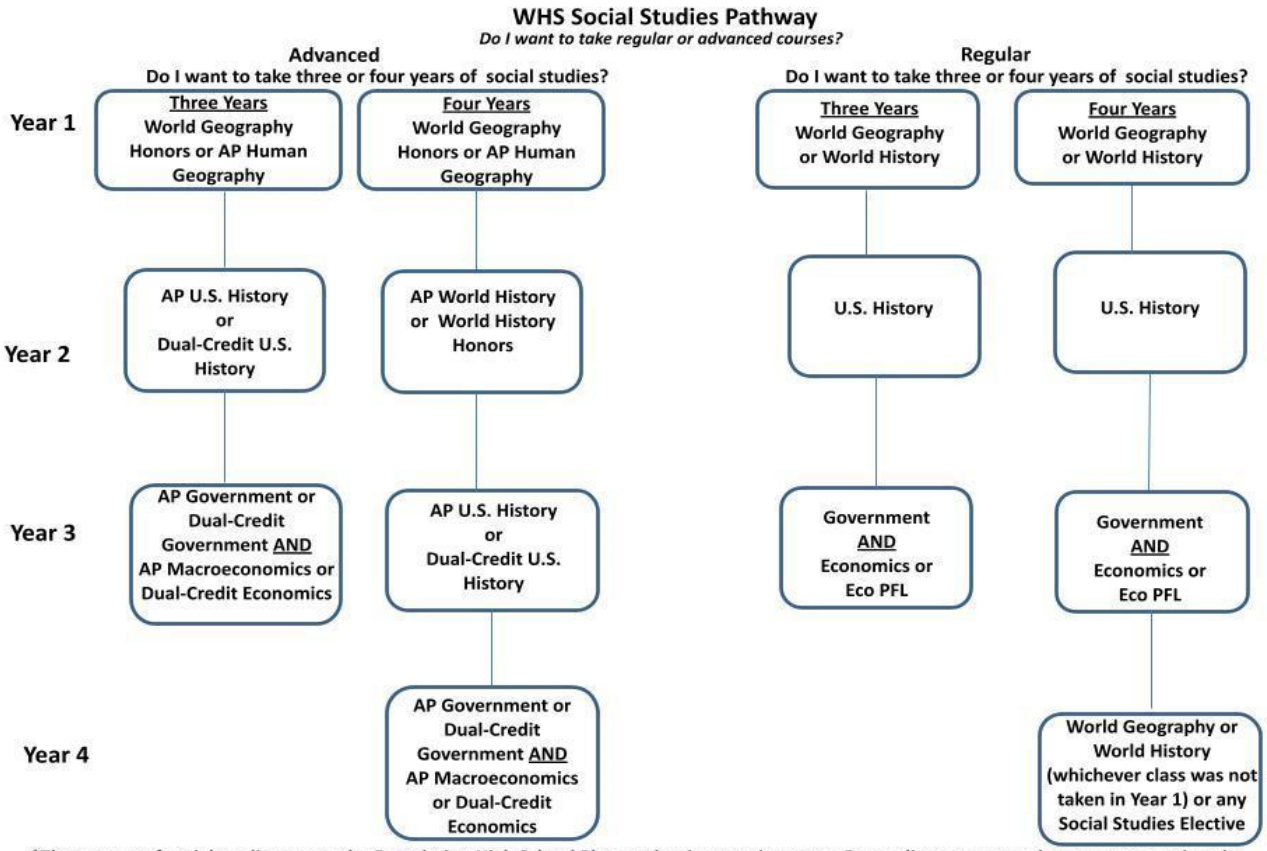
Course Description: The Pathophysiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology will study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology. Lab Fee is $5.00. ***This course satisfies the 3rd or 4th year Science credit.***

Forensic Science **(CTFORE)**
11th-12th **1 credit** **4.0**

Prerequisite: *Required* Biology and one credit of IPC, Chemistry, or Physics

Course Description: Forensic Science is a course that introduces students to the application of science to connect a violation of law to a specific criminal, criminal act, or behavior and victim. Students will learn terminology and procedures related to the search and examination of physical evidence in criminal cases as they are performed in a typical crime laboratory. Using scientific methods, students will collect and analyze evidence such as fingerprints, bodily fluids, hairs, fibers, paint, glass, and cartridge cases. Students must meet the 40% laboratory and fieldwork requirement. ***This course satisfies the 3rd or 4th year Science graduation requirement***.

SOCIAL STUDIES



*Three years of social studies meets the Foundation High School Plan graduation requirements. Depending on your endorsements or university admission requirements, a student may need three or four years of social studies. Always verify university admission requirements because most universities require high school graduates to have four years of social studies.

*Dual Credit Courses – Always verify that your potential university accepts Texas community college dual credit courses.

World Geography Studies **(HWGRG)**
9th – 12th **1 credit** **4.0**
Prerequisite: *None*
Description: In World Geography Studies, students examine people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present with emphasis on contemporary issues. A significant portion of the course centers around the physical processes that shape patterns in the physical environment; the characteristics of major landforms, climates, and ecosystems and their interrelationships; the political, economic, and social processes that shape cultural patterns of regions; types and patterns of settlement; the distribution and movement of the world population; relationships among people, places, and environments; and the concept of region. Students analyze how location affects economic activities in different economic systems. Students identify the processes that influence political divisions of the planet and analyze how different points of view affect the development of public policies. Students compare how components of culture shape the characteristics of regions and analyze the impact of technology and human modifications on the physical environment. Students use problem-solving and decision-making skills to ask and answer geographic questions.

World Geography Honors **(HWGHN)**
9th – 12th **1 credit** **5.0**
Prerequisite: *None* (Refer to Entrance Information Regarding Advanced Courses)
Course Description: In World Geography Studies, students examine people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present with emphasis on contemporary issues. A significant portion of the course centers around the physical processes that shape patterns in the physical environment; the characteristics of major landforms, climates, and ecosystems and their interrelationships; the political, economic, and social processes that shape cultural patterns of regions; types and patterns of settlement; the distribution and movement of the world population; relationships among people, places, and environments; and the concept of region. Students analyze

how location affects economic activities in different economic systems. Students identify the processes that influence political divisions of the planet and analyze how different points of view affect the development of public policies. Students compare how components of culture shape the characteristics of regions and analyze the impact of technology and human modifications on the physical environment. Students use problem-solving and decision-making skills to ask and answer geographic questions.

AP Human Geography **(HHMGAP)**
9th – 12th **1 credit** **5.0**
Prerequisite: *None* (Refer to Entrance Information Regarding Advanced Courses)
Course Description: The purpose of the AP course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. This course provides the opportunity to earn college credit upon satisfactory performance on the AP exam. Please check the College Board website to see information on how credits transfer to universities. *As of the 2015- 2016 school year, the one-credit AP Human Geography course must provide instruction in the TEKS for World Geography, and students are not able to earn credit for both World Geography Studies and the one-credit AP Human Geography course.*

World History Studies **(HWHRG)**
9th – 12th **1 credit** **4.0**
Prerequisite: *None*
Course Description: World History Studies is a survey of the history of humankind. Due to the expanse of world history and the time limitations of the school year, the scope of this course should focus on "essential" concepts and skills that can be applied to various eras, events, and people within the standards in subsection (c) of this section. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in other parts of the world. Students evaluate the causes and effects of political and economic imperialism and of major political revolutions since the 17th century. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which constitutional governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and political concepts. Students examine the history and impact of major religious and philosophical traditions. Students analyze the connections between major developments in science and technology and the growth of industrial economies, and they use the process of historical inquiry to research, interpret, and use multiple sources of evidence.

World History Honors **(HWHHN)**
9th – 12th **1 credit** **5.0**
Prerequisite: *None* (Refer to Entrance Information Regarding Advanced Courses)
Course Description: World History Studies is a survey of the history of humankind. Due to the expanse of world history and the time limitations of the school year, the scope of this course should focus on "essential" concepts and skills that can be applied to various eras, events, and people within the standards in subsection (c) of this section. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in other parts of the world. Students evaluate the causes and effects of political and economic imperialism and of major political revolutions since the 17th century. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which constitutional governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and political concepts. Students examine the history and impact of major religious and philosophical traditions. Students analyze the connections between major developments in science and technology and the growth of industrial economies, and they use the process of historical inquiry to research, interpret, and use multiple sources of evidence.

AP World History **(HWHIAP)**
10th– 12th **1 credit** **5.0**
Prerequisite: *None* (Refer to Entrance Information Regarding Advanced Courses)
Course Description: AP World History: Modern focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance focusing on the environment, cultures, state-building, economic systems, and social structures provide areas of historical inquiry for investigation throughout the course. AP World History Modern encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. This course provides the opportunity to earn college credit upon satisfactory performance on the AP exam. Please check with each university for score requirements. Students can take either World History Honors or AP World History: Modern to satisfy the World History credit, and students are not able to earn credit for both World History Honors and the one-credit AP World History course.

United States History Studies Since 1877 **(HUSRG)**
10th-11th **1 credit** **4.0**
Prerequisite: *None*
Course Description: In United States History Studies Since 1877, which is the second part of a two-year study that begins in Grade 8, students study the history of the United States from 1877 to the present. The course content is based on the founding documents of the U.S. government, which provide a framework for its heritage. Historical content focuses on the political, economic, and social events and issues related to industrialization and urbanization, major wars, domestic and foreign policies, and reform movements, including civil rights. Students examine the impact of geographic factors on major events and eras and analyze their causes and effects. Students examine the impact of constitutional issues on American society, evaluate the dynamic relationship of the three branches of the federal government, and analyze efforts to expand the democratic process. Students describe the relationship between the arts and popular culture and the times during which they were created. Students analyze the impact of technological innovations on American life. Students use critical-thinking skills and a variety of primary and secondary source material to explain and apply different methods that historians use to understand and interpret the past, including multiple points of view and historical context.

AP United States History **(HUSAP)**
10th-11th **1 credit** **5.0**
Prerequisite: *None (Refer to Entrance Information Regarding Advanced Courses)*
Course Description: This college level course is a required study of the nation's economic, social, and political development. It is designed to give students an understanding of the issues that have grown out of the significant events in the nation's history, of the forces that have helped shape our political, social, and economic institutions and the ways in which each generation has approached solutions to the problems. Students will learn to think about history in an analytical way. This course also requires outside reading and independent study and research. This course covers material from the Age of Discovery to the present. This course provides the opportunity to earn college credit upon satisfactory performance on the AP exam. Please check with each university for score requirements.

United States History (HIST 1301 & HIST 1302) Dual Credit **(H1301)/(H1302)**
10th-12th **1 credit** **5.0**
Prerequisite: *College eligibility per Blinn College guidelines*
Course Description: This college level course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, books, etc. A student may earn up to three (3) hours of college credit for taking this course each semester.
HIST 1301: A survey of United States history that begins with the migrations of people to the western hemisphere and continues through the Civil War and Reconstruction period. The course focuses on the periods of discovery, colonization, revolution, and nation building. Material presented covers a wide variety of topics encompassing social, cultural, intellectual, military, and political history. 48 contact hours. Credit: Three semester hours.. **Fall**
HIST 1302: A survey of United States history from 1877 to the present. The course covers industrial, social, and political problems from 1877 to the emergence of the United States as a world power in the twentieth century. Material presented covers a wide variety of topics including the Gilded Age, the Progressive Period, World War I, the Depression and the New Deal, World War II, the Cold War, and contemporary events. 48 contact hours. Credit: Three semester hours. **Spring**

United States Government **(HGOVRG)**
11th-12th **½ credit** **4.0**
Prerequisite*: None*
Course Description: The focus is on the principles and beliefs upon which the United States was founded and on the structure, functions, and powers of government at the national, state, and local levels. Students learn major political ideas and forms of government in history. A significant focus of the course is on the U.S. Constitution, its underlying principles and ideas, and the form of government it created. Students analyze major concepts of republicanism, federalism, checks and balances, separation of powers, popular sovereignty, and individual rights and compare the U.S. system of government with other political systems. Students identify examples of government policies that encourage scientific research and use critical- thinking skills to create a product on a contemporary government issue.

AP United States Government and Politics **(HGOVAP)**
11th-12th **½ credit** **5.0**
Prerequisite: *None* (Refer to Entrance Information Regarding Advanced Courses)
Course Description: AP United States Government and Politics is a one semester, college level, intensive study of the formal and informal structure of American Government and the processes of the American political system with an emphasis on policy- making and implementation. This course includes both the general concepts used to interpret U.S. politics and the analysis of specific examples. This course provides the opportunity to earn college credit upon satisfactory performance on the AP exam. Please check with each university for score requirements.

Federal Government (GOVT 2305) Dual Credit **(HG2305)**
11th-12th **½ credit** **5.0**
Prerequisite: College eligibility per Blinn College guidelines
Course Description: This course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, book, etc. An examination of the institutional elements of the American political system: legislature, executive, judiciary, and bureaucracy. These elements are examined at the national, state, and local levels with a special emphasis on their roles in the development of public policy. A student may earn up to three (3) hours of college credit for taking this course.
GOVT 2305: Government 2305 is a study of the organization, functions, and administration of the several branches and agencies of the national government, including a study of the federal constitution. The primary factors considered relate to the three branches of government – judicial, executive, legislative – major historical documents, the events that shaped the nation, and current events. Emphasis will be placed on the interaction of these subsystems. 48 contact hours. Credit: Three semester hours. **Fall**

State Government (GOVT 2306) Dual Credit- Special Topics in Social Studies **(HG2306)**
11th-12th **½ credit** **5.0**
Prerequisite: *College eligibility per Blinn College guidelines*
Course Description: This course for both high school and college credit will be offered through Blinn College. Students must meet placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, book, etc. This course will cover the Special Topics in Social Studies TEKS, as well as Celebrate Freedom Week, which educates students about the sacrifices made for freedom in the founding of this country and the values on which this country was founded. A student may earn up to three (3) hours of college credit for taking this course during the summer in addition to high school Social Studies elective credit for "Special Topics in Social Studies."
GOVT 2306: Government 2306 is a study of the organization, functions, and administration of the several branches and bureaucracy of the Texas state and local government, including a study of the numerous Texas constitutions. The primary factors considered relate to the three branches of government – judicial, executive, legislative – current Texas Constitution, events that shaped the state, and current events. Emphasis will be placed on the interaction of these subsystems. 48 contact hours. Credit: Three semester hours. **Spring**

Economics **(HECORG)**
11th – 12th **½ credit** **4.0**
Prerequisite: *None*
Course Description: The focus is on the basic principles concerning production, consumption, and distribution of goods and services (the problem of scarcity) in the United States and a comparison with those in other countries around the world. The course also incorporates instruction in personal financial literacy. Students apply critical-thinking skills using economic concepts to evaluate the costs and benefits of economic issues.

Personal Financial Literacy and Economics **(HPFECO)**
11th – 12th **½ credit** **4.0**
Prerequisite: *None*
Course Description: The Personal Financial Literacy and Economics Course emphasizes the economic way of thinking, which serves as a framework for the personal financial decision-making opportunities introduced in the course. Students will demonstrate the ability to anticipate and address financial challenges as these challenges occur over their lifetime. In addition, students are introduced to common economic and personal financial planning terms and concepts. As a result of learning objective concepts and integrating subjective information, students gain the ability to lead productive and financially self-sufficient lives. This class meets the state Economics requirement.

AP Macroeconomics **(HECOMP)**
11th-12th **½ credit** **5.0**
Prerequisite: *None (Refer to Entrance Information Regarding Advanced Courses)*
Course Description: This course introduces students to the principles of economics that apply to an economic system in the aggregate. Emphasis is placed on the study of national income, fiscal and Federal Reserve policy. It also develops the student's familiarity with economic performance measures, economic growth and international economics. It is extremely useful in understanding the extraordinary changes that the world is undergoing today. A strong math background is recommended for the success of this course. This course provides the opportunity to earn college credit upon satisfactory performance on the AP exam. Please check with each university for score requirements.

Macroeconomics (ECON 2301) Dual Credit **(HE2301)**
11th-12th **½ credit** **5.0**
Prerequisite:
Course Description: This course for both high school and college credit will be offered through Blinn College. Students must meet

placement requirements set by Blinn College, which may include testing at the student's expense. Students must pay the required fees for tuition, book, etc. This course will cover the Economics TEKS. A student may earn up to three (3) hours of college credit for taking this course during the summer in addition to high school credit for Economics.
ECON 2301: An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy. **Summer.**

Personal Financial Literacy **(HPFLIT)**
10th-12th **½ credit** **4.0**
Prerequisite: *None*
Course Description: Personal Financial Literacy will develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lifestyles and understand personal financial responsibility. The knowledge gained in this course has far-reaching effects for students personally as well as the economy as a whole. When citizens make wise financial decisions, they gain opportunities to invest in themselves, build businesses, consume goods and services in a responsible way, and secure a future without depending on outside assistance. The economy benefits from the optimal use of resources, increased consumption, and strong local businesses. State and local governments benefit with steady revenue streams and reduced future obligations as our society ages. ***This course will count into the GPA as an academic elective.***

AP European History **(HEHAP)**
11th – 12th **1 credit** **5.0**
Prerequisite: *None*
Description: Students will learn about the cultural, economic, political, and social developments that have shaped today's world through the study of European history from the year 1450 to the present. They will analyze historical evidence and interpretation and express your historical understanding through writing as they explore principal themes of modern European history. This course provides the opportunity to earn college credit upon satisfactory performance on the AP exam. Please check with each university for score requirements. ***This course will count into the GPA as an academic elective.***

Psychology **(HPSYRG)**
10th-12th **½ credit** **4.0**
Prerequisite: *None*
Course Description: Students study the science of behavior and mental processes. Students examine the full scope of the science of psychology such as the historical framework, methodologies, human development, motivation, emotion, sensation, perception, personality development, cognition, learning, intelligence, biological foundations, mental health, and social psychology. ***This course will count into the GPA as an academic elective.***

AP Psychology/(Honors) **(HPSYAP)/(HPSYHN)**
11th – 12th **1 credit** **5.0**
Prerequisite: *None* (Refer to Entrance Information Regarding Advanced Courses) *Corequisite* Psychology Honors
Course description: The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. The aim of the course is to provide the student with a learning experience equivalent to that obtained in most college introductory psychology courses. This course provides the opportunity to earn college credit upon satisfactory performance on the AP exam. Please check with each university for score requirements. ***This course will count into the GPA as an academic elective.***

Sociology **(HSOCRG)**
11th–12th **½ credit** **4.0**
Prerequisite: *None*
Course Description: Sociology, an elective course, is an introductory study in social behavior and organization of human society. This course will describe the development of the field as a social science by identifying methods and strategies of research leading to an understanding of how the individual relates to society and the ever-changing world. Students will also learn the importance and role of culture, social structure, socialization, and social change in today's society. ***This course will count into the GPA as an academic elective.***

HEALTH/PHYSICAL EDUCATION

Health

Health **(HHLTH)**
9th – 12th **½ credit**
Prerequisite: *None*
Course Description: Provides opportunities for students to acquire facts, to develop proper attitudes, and to establish practices and habits that contribute to personal and community health. Students will also have the opportunity to be certified in Adult CPR/AED and First Aid through the American Red Cross. With parent permission, this course may be delayed until 11th or 12th grade.

PHYSICAL EDUCATION

Fitness Tests
Senate Bill 8, passed by the Texas Legislature in 2011 requires that each student enrolled in PE credit courses in grades 3-12 be given an annual fitness test. The instrument to be used is the Fitness Gram which includes Body Mass Index, cardiovascular test (one mile run/walk), curl ups, push-ups, shoulder stretch, and trunk lift. **Students in PE are required to dress in appropriate personal athletic clothing (plain gray T-shirt and black shorts) and athletic footwear.**

Off Campus Physical Activity **(OFFPE1)(OFFPE2)(OFFPE3)(OFFPE4)**
Private or commercially sponsored physical activity programs may be substituted for physical education credits in grades 9-12, if substitute facility is approved by the school district and the Texas Education Agency. See your school counselor for information regarding Level I or II off campus physical activity substitutes. *Requests for this must be made no later than the last day of the spring semester of the previous year for the fall semester and December 1st for the spring semester to the student's counselor.*

Lifetime Fitness and Wellness Pursuits **(PHLFW)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: The Lifetime Fitness and Wellness Pursuits course offers current approaches for the foundation of personal fitness, wellness, physical literacy, lifetime wellness, and healthy living. Students in Lifetime Fitness and Wellness Pursuits will apply the knowledge and skills to demonstrate mastery of the concepts needed to achieve lifetime wellness. Students will participate in a variety of physical activities for attaining personal fitness and lifetime wellness. **Students in PE are required to dress in appropriate personal athletic clothing (plain gray T-shirt and black shorts) and athletic footwear.**

Skill-Based Lifetime Activities **(PHSBLA)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: The Skill-Based Lifetime Activities course offers students the opportunity to demonstrate mastery in basic skills, basic sport knowledge, and health and fitness principles. Students experience opportunities that promote physical literacy and lifetime wellness. Students in Skill-Based Lifetime Activities will participate in at least one activity from the following categories: Target games, striking and fielding games, fitness activities, rhythmic activities, and innovative games/international games. **Students in PE are required to dress in appropriate personal athletic clothing (plain gray T-shirt and black shorts) and athletic footwear.**

COMPETITIVE ATHLETICS

One unit of credit from athletics may be substituted for the Physical Education requirement and the three other units of credit may count as state electives.

If a student/athlete is dismissed from athletics due to behavior/ discipline problems, grade deficiencies etc., or if a student quits athletics, a schedule change to a physical education class may be requested by the athletic coordinator.

Boys' Athletics

9th – 12th **½-1 credit**

Football	**(PHB1)(PHB2)(PHB3)(PHB4)**
Soccer	**(PHBS1)(PHBS2)(PHBS3) (PHBS4)**
Wrestling	**(PHWR1)(PHWR2)(PHWR3)(PHWR4)**
Cross Country	**(PHCC1)(PHCC2)(PHCC3)(PHCC4)**
Tennis	**(PHTN1)(PHTN2)(PHTN3)(PHTN4)**
Track	**(PHBTK1)(PHBTK2)(PHBTK3)(PHBTK4)**
Baseball	**(PHBBS1)(PHBBS2)(PHBBS3)(PHBBS4)**
Basketball	**(PHBBK1)(PHBBK2)(PHBBK3)(PHBBK4)**

Prerequisite: Tryouts or Coach Request; **Current Athletic Physical on file with Athletic Training staff.**
Practice time: 3:00 p.m. until 6:00 p.m., or as determined by the coach. Some Saturdays
Course Description: Includes mandatory after-school training and/or before school, participation in competitive sports and off-season training. Off-season is NOT a weight training class. Students are responsible for all equipment issued and must pay for equipment not returned. Students are required to get a new physical each school year.

- Athletics – Participants should be enrolled in Fall and Spring semesters.
- Golf and Powerlifting participants will practice after school during their respective seasons. Participants are not required to be in the athletic period.

Girls' Athletics

9th-12th **½-1 credit**

Soccer	**(PHGS1)(PHGS2)(PHGS3)(PHGS4)**
Wrestling	**(PHWR1)(PHWR2)(PHWR3)(PHWR4)**
Cross Country	**(PHCC1)(PHCC2)(PHCC3)(PHCC4)**
Tennis	**(PHTN1)(PHTN2)(PHTN3)(PHTN4)**
Track	**(PHGTK1)(PHGTK2)(PHGTK3)(PHTGK4)**
Volleyball	**(PHVB1)(PHVB2)(PHVB3)(PHVB4)**
Basketball	**(PHGBK1)(PHGBK2)(PHGBK3)(PHGBK4)**
Softball	**(PHGSB1)(PHGSB2)(PHGSB3)(PHGSB4)**

Prerequisite: Tryouts or Coach Request; **Current Athletic Physical on file with Athletic Training staff.**
Practice time: 3:00 p.m. until 6:00 p.m., or as determined by the coach. Some Saturdays
Course Description: Includes mandatory after-school training and/or before school, participation in competitive sports and off-season training. Off season is NOT a weight training class. Students are responsible for all equipment issued and must pay for equipment not returned. Students are required to get a new physical each school year.

- Athletics – Participants should be enrolled in Fall and Spring semesters.
- Golf and Powerlifting participants will practice after school during their respective seasons. Participants are not required to be in the athletic period.

Cheerleading **Year-1 PE substitution (PHCIA)**
9th-12th **Year 2, 3, 4-LOCALELECTIVE(PHCH2A)(PHCH3A)(PHCH4A)**

Prerequisites: Tryout selection during the previous spring
Course Description: Students selected for the team are required to attend summer camp and summer practices. Students must be enrolled in this course to participate in the cheerleading program. Students are required to attend practices, sports, events, parages, and special events which are outside of the school day. All cheerleaders must adhere to program requirements as stated in the cheerleading constitution. ***During year I, this course is for PE Substitution Credit. During year 2, 3, 4, this course is for LOCAL credit and WILL NOT count towards graduation.***

Sports Medicine I **(PHSM1)**
9th-12th **1 credit**

Prerequisite: Licensed Athletic Trainer Approval.
Course Description: This course provides an opportunity for the study and application of the components of sports medicine but not limited to sports medicine related careers, organizational and administrative considerations, prevention of athletic injuries, rehabilitation and management skills, taping and wrapping techniques, first aid/CPR/AED, emergency procedures, nutrition, sports psychology, human anatomy and physiology, therapeutic modalities, and therapeutic exercise. Students will be required to help with practice and game setup during class period. Practice and game coverage is required. Students must be available for before- and after-school treatments, practices, games, and clinics held on Saturday and during the summer. ***This course will not count for PE credit.***

Sports Medicine II **(PHSM2)**
10th-12th **1 credit**

Prerequisite: *Required* Sports Medicine I; Must be in Athletic Training Program; Licensed Athletic Trainer Approval.
Course Description: This course is designed for athletic training students. It provides an in-depth study and application of the components of sports medicine including but not limited to basic rehabilitative techniques, therapeutic modalities, wound care, taping and bandaging techniques, prevention, recognition and care of musculoskeletal injuries; injuries to the young athlete; drugs in sports; modern issues in sports medicine. Individualized and independent assignments will be included in this course. This course will involve outside-of-class time homework and time required working with athletes and athletic teams. Students will be required to help with practice and game setup during class period. Practice and game coverage is required. ***This course will not count for PE credit.***

Sports Medicine III **(PHSM3)**
11th-12th **1 credit**

Prerequisite: *Required* Sports Medicine I & II; Must be in Athletic Training Program; Licensed Athletic Trainer Approval
Course Description: This course will provide a logical progression for students that have advanced through the sports medicine courses and provide them with an opportunity to apply the knowledge and skills they have gained to athletic injury recognition, evaluation, management, treatment, and rehabilitation through research investigations and applications relate to sports medicine. ***This course will not count for PE credit.***

Basic Athletic Training **(PHBAT)**
12th **1 credit**

Prerequisite: Must be in Athletic Training Program; Licensed Athletic Trainer Approval.
Course Description: Will provide a basic knowledge and skills of athletic injury assessment, management, and use of modalities. The course will be curriculum based and will cover basic preventative taping, first aid, training room management and provide a general knowledge of athletic injuries and their management. This course will also include scientific/medical terminology, human anatomy, kinesiology, and exercise physiology. Students will also receive certification in CPR/AED and First Aid. After-school work at games and practices is required. ***This course is for local credit and will not count towards graduation requirements for PE.***

AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS (AFJROTC)

The AFJROTC program at Waller High School offers four courses—AFJROTC 1, 2, 3, and 4—each consisting of three components: Aerospace Science (AS), Leadership Education (LE), and Wellness. Students enrolled in AFJROTC receive Physical Education (PE) credit (1 credit per academic year). All classes are blended and can be taken in any order during their high school years allowing ease of scheduling for both and student and counselor.

Students active in the AFJROTC program are called cadets. The AFJROTC program requires cadets to sign a behavior contract pledging to properly care for issued uniform items, textbooks, and other equipment. Furthermore, cadets are required to meet AFJROTC grooming standards and properly wear an Air Force uniform once a week.

AFJROTC I-IV **(ROTC1)(ROTC2)(ROTC3)(ROTC4)**
9th – 12th **1 credit**
Prerequisite: Must sign a behavior contract. (NOTE: AFJROTC 1, AFJROTC 2, AFJROTC 3, and AFJROTC 4 rotate course offerings on four-year rotation allowing blended classes and better ability to schedule cadets for four-year program.

Course Description:
Aerospace Studies Component: The Science of Flight: A Gateway to Hew Horizons is an introductory course and customized textbook that focuses on how airplanes fly, how weather conditions affect flight, flight, flight and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses and is aligned with the National Science Education Standards, the Math Standards and Expectations, and ISTE National Educational Technology Standards for Students. In this course, every lesson includes a "Quick Write" and a short story related to the lesson; a "Learn About" that tells students what they'll learn from the lesson; a list of vocabulary words in the lesson; "Wing Tips" that highlight specific and interesting facts; and many biographies and profiles. Each lesson closes with "Checkpoints" that will allow students to review what they have learned. An "Applying Your Learning" section at the end of each lesson presents discussion questions that will give them a chance to chance to use what they have learned and provides another way to reinforce their understanding of the lesson's content. The text has four chapters, each of which contains a number of lessons.

Course Outcomes:
1. Analyze the elements of flight.
2. Evaluate how atmospheric conditions affect flight.
3. Evaluate how flight affects the human body.
4. Analyze flight navigation and the purpose of aerial navigation aids.

Leadership Component: Life Skills and Career Opportunities provide an essential component of leadership education for today's high school students. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st century. Students will learn how to become a more confident financial planner and to save, invest, and spend money wisely, as well as how to avoid the credit trap. They will learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving strategies for grocery shopping, apartment selection, and life with roommates. The Holland Interest Inventory and other self-assessments will help them to reveal their attitudes, aptitudes, and personal skills. This self-understanding will allow them to explore career paths and understand the requirements that they will need to be successful at work and in life. To help students increase their potential for success through education, they will learn how to select a school that is right for them; how to apply for admission to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They will learn how to prepare a winning résumé, and how to develop effective interviewing skills. Students will become more skilled at using the Internet for career research and learn how to network safely using social media. The text also provides information on working for the federal government to include careers in the military, aerospace industry, and public service. Finally, students will consider the most important elements of life skills for all Americans: civic responsibilities, such as volunteering, registering to vote, jury duty, and draft registration.
Course Outcomes:
1. Analyze the elements of successful financial management skills.
2. Create a plan to safeguard personal resources.
3. Analyze the different ways of pursuing a career path.

4. Analyze the requirements for applying to a college or university.
5. Analyze positive and negative impact of college life in meeting career goals.
6. Evaluate the essential process for successfully pursuing desired career or job.
7. Evaluate the benefits of working for the Federal Government.
8. Create a plan for successful career development.

Wellness component: Includes President's Physical Fitness Program and Fitness gram participation. Also includes team sports and fitness-promoting activities developed and led by cadets.

Course Outcomes:

1. Motivate cadets to lead active, healthy lifestyles beyond program requirements and into their adult lives

1. Create an individualized training program based on national standards by age and gender.
2. Identify areas of improvements for each cadet and provide guidance for improvement.
3. Incorporate a physical training program to reach fitness goals.

LANGUAGES OTHER THAN ENGLISH

Spanish I **(FLSP1)**
9th – 11th **1 credit** **4.0**
Prerequisite: *None*
Course Description: An elementary introduction to the Spanish language beginning with oral Spanish of everyday life situations. It progresses to more difficult language patterns and a study of two simple tenses. Grammar patterns necessary for the comprehension of the language are studied. Speaking, writing, reading, and comprehension of the language are studied and experienced. Materials used include audiovisuals made by native Spanish teachers.

Spanish I for Native Speakers **(FLNS1)**
9th – 11th **1 credit** **4.0**
Prerequisite: *None*
Course Description: An elementary introduction to the Spanish language beginning with oral Spanish of everyday life situations. It progresses to more difficult language patterns and a study of two simple tenses. Grammar patterns necessary for the comprehension of the language are studied. Speaking, writing, reading, and comprehension of the language are studied and experienced. Materials used include audiovisuals made by native Spanish teachers.

Spanish II **(FLSP2)**
9th – 12th **1 credit** **4.0**
Prerequisite: *Required* Spanish I or demonstrated equivalent proficiency as determined by the district
Course Description: Grammar patterns are extended to include additional tenses. Reading lessons are concerned with the Hispanic nations, their history, culture, economy, etc. More time is devoted to reading and writing language than the first year. Speaking and comprehending the spoken language are still primary aims.

Spanish II for Native Speakers **(FLSNS2)**
9th – 12th **1 credit** **4.0**
Prerequisite: *Required* Spanish I or demonstrated equivalent proficiency as determined by the district
Course Description: Grammar patterns are extended to include additional tenses. Reading lessons are concerned with the Hispanic nations, their history, culture, economy, etc. More time is devoted to reading and writing language than the first year. Speaking and comprehending the spoken language are still primary aims.

Spanish III Honors **(FLSP3)**
9th – 12th **1 credit** **5.0**
Prerequisite: *Required* Spanish II or demonstrated equivalent proficiency as determined by the district
Course Description: This course concentrates on oral communication skills, written communication skills, and reading skills. Activities are theme related and reflect the grammar and vocabulary taught. Literary works by well-known Hispanic writers are studied. The subtleties and nuances of the language and the "art" of translation are addressed in detail and a "refresher review" of grammar is also included. This course provides an opportunity to earn college credit upon completion of AP exam and receiving a score of 3 or higher.

Spanish IV AP **(FLSP4)**
9th – 12th **1 credit** **5.0**
Prerequisite: *Required* Spanish III or demonstrated equivalent proficiency as determined by the district
Course Description: This course introduces students to outstanding examples of Spanish and Hispano-American literature through diverse literary genres: short story, poetry, novel, biography, essay, and drama. The history and culture of Spain and Latin America are interwoven, with emphasis on the influence of the "mother country" on the Americas. The subtleties and nuances of the language and the "art" of translation are addressed in detail and a "refresher review" of grammar is also included. Opportunity for original conversation, memorization, written expression, and dramatization is presented throughout the course. This course provides an opportunity to earn college credit upon completion of AP exam and receiving a score of 3 or higher.

Spanish V AP **(FLSP5)**
9th – 12th **1 credit** **5.0**
Prerequisite: *Required* Spanish IV or demonstrated equivalent proficiency as determined by the district
Course Description: This course introduces students to outstanding examples of Spanish and Hispano-American literature through diverse literary genres: short story, poetry, novel, biography, essay, and drama. The history and culture of Spain and Latin America; are interwoven, with emphasis on the influence of the "mother country" on the Americas. The subtleties and nuances of the language and the "art" of translation are addressed in detail and a "refresher review" of grammar is also included. Opportunity for original conversation, memorization, written expression, and dramatization is presented throughout the course. This course provides an opportunity to earn college credit upon completion of the AP exam and receiving a score of 3 or higher.

French I **(FLFR1)**
9th – 12th **1 credit** **4.0**
Prerequisite: *None*
Course Description: An elementary introduction to the French language beginning with oral French of everyday life situations. It progresses to more difficult language patterns and a study of everyday life situations. Grammar patterns necessary for the comprehension of the language are studied. Speaking, writing, reading, and comprehension of the language are experienced.

French II **(FLFR2)**
9th – 12th **1 credit** **4.0**
Prerequisite: *Required* French I or demonstrated equivalent proficiency as determined by the district
Course Description: Grammar patterns are extended to include the past, future, imperative and conditional tenses. Reading lessons concern France, its history, culture, economy, etc. More time is devoted to reading and writing the language than the first year. Speaking and comprehending the spoken language are still the primary aims.

French III Honors **(FLFR3)**
10^{th} – 12^{th} **1 credit** **5.0**
Prerequisite: *Required* French II or demonstrated equivalent proficiency as determined by the district
Course Description: Helps students to continue to develop proficiency in the four basic skills: listening, speaking, reading, and writing. Students will solidify and expand upon the grammar learned in levels I and II. Readings will include popular fairy tales and other native sources. This course aims to increase the student's knowledge and appreciation of the French culture.

French IV AP **(FLFR4)**
10^{th}-12th **1 credit** **5.0**
Prerequisite: *Required* French III or demonstrated equivalent proficiency as determined by the district
Course Description: This course concentrates on oral communication skills, written communication skills, and reading skills. Activities are theme related and reflect the grammar and vocabulary taught. Literary works by well-known Francophone writers are studied. This class focuses more on nuances of grammar rather than direct grammar instruction and attempts to "speed up" the students' thought process in French to allow for more natural communication. This course provides an opportunity to earn college credit upon completion of AP exam and receiving a score of 3 or higher.

LOTE Computer Science I **(FLCS1)**
9^{th} – 12^{th} **1 credit** **4.0**
Prerequisite: *Required* Algebra I or concurrent enrollment in Algebra I
Course Description: Students will design well-structured computer programs that solve problems of various varieties. Students will work in the Java programming language as they develop their algorithms. Students will also be introduced to advanced topics like Boolean Logic, Digital Circuitry, and Number Systems. ***Credits earned for Computer Science I and II satisfy LOTE credit requirement.***

LOTE Computer Science I Honors **(FLCP1H)**
9^{th} – 12^{th} **1 credit** **5.0**
Prerequisite: *Required* Algebra I or concurrent enrollment in Algebra I
Course Description: Students will design well-structured computer programs that solve problems of various varieties. Students will work in the Java programming language as they develop their algorithms. Students will also be introduced to advanced topics like Boolean Logic, Digital Circuitry, and Number Systems. ***Credits earned for Computer Science I and II satisfy LOTE credit requirement.***

LOTE Computer Science II **(FLCS2)**
10^{th} – 12^{th} **1 credit** **4.0**
Prerequisite: *Required* Algebra I and LOTE Computer Science or AP Computer Science Principles
Course Description: Computer Science II will extend the depth of Computer Science II skills with advanced projects giving students opportunities to design, implement, and present meaningful programs through a variety of media. 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. ***Credits earned for Computer Science I and II satisfy LOTE credit requirement.***

LOTE Computer Science II Honors **(FLCS2H)**
10th – 12th **1 credit** **5.0**
Prerequisite: *Required* Algebra I and LOTE Computer Science or AP Computer Science Principles
Course Description: Computer Science II Honors will extend the depth of Computer Science II skills with advanced projects giving students' opportunities to design, implement, and present meaningful programs through a variety of media. 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. ***Credits earned for Computer Science I and II satisfy LOTE credit requirement.***

AP Computer Science LOTE (Languages Other Than English) and Math **(TACSAL)(TACSAP)**
11th– 12th **2 credits** **5.0**
Prerequisite: *Recommended* Algebra **I**
Course Description: Students continue the study of software design, writing well-designed well-structured computer programs that solve problems in the fields of Math and Science. Students will work in the Java programming language as the focus on the design and structure of Java classes. Students will also be introduced to advanced topics like Binary Trees, Graph Theory, and Digital Electronics. Students will prepare for the Computer Science Advanced Placement Exam. ***This course satisfies the 3rd or 4th year Mathematics credit as well as a LOTE credit for graduation.*** This course provides an opportunity to earn college credit upon completion of AP exam and receiving a satisfactory score. Students must co-enroll in Computer Science AP Math and LOTE.

Special Topics in Language and Culture **(FLSTLC)**
9th – 12th **1 credit** **4.0**
Prerequisite: *Approval by*: (1) the student's level I LOTE classroom teacher or our LOTE designee, the principal or designee, and the student's parent or person standing in parental relation who determine that the student is not likely to be successful in a level II LOTE course; (2) the student's admission, review, and dismissal (ARD) committee if the student receives special education services or (3) the committee established for the student under Section 504.
Course Description: 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. This course cannot be considered a part of the coherent sequence of Languages other than English (LOTE) courses required for any endorsement. This course will not count as a level II LOTE course. Students who desire to continue with LOTE study will need to take level II or higher LOTE courses. This course may be substituted for a level II LOTE course upon approval as stated above.

FINE ARTS

All students must complete one (1) credit of fine arts. Courses that satisfy this requirement are Choir, Dance, Art, Theatre Arts, and Floral Design in the CTE department. Band and Drill Team may also satisfy this requirement during the spring semester only.

ART

Art I **(FAAR1)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Four basic strands—perception, creative expression/performance, historical and cultural heritage, and critical evaluation—provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students will rely on their perceptions of the environment, developed through increasing visual awareness and sensitivity to surroundings, memory, imagination, and life experiences, as a source for creating artworks. Students will express their thoughts and ideas creatively, while challenging their imagination, foster reflective thinking, and development disciplined effort and problem-solving skills. By analyzing artistic styles and historical periods students develop respect for traditions and contributions of diverse cultures. Students will respond to and analyze artworks, thus contributing to the development of lifelong skills of making informed judgments and evaluations. ***This course will satisfy the fine arts requirement for graduation.***

Art II – IV- Drawing **(FADR2) (FADR3) (FADR4)**
9th – 12th **1 credit**
Prerequisite: *Required* one credit of Art in the previous course
Course Description: This advanced course includes developing the skills learned in Art I through the use of various dry media including pencil, pastel, oil pastel, charcoal, and colored pencil. Different styles of art will be explored while building technique. ***This course will satisfy the fine arts requirement for graduation.***

Art II – IV- Painting **(FAPT2) (FAPT3) (FAPT4)**
9th – 12th **1 credit**
Prerequisite: *Required* one credit of Art in the previous course
Course Description: This advanced course includes developing the skills learned in Art I through the use of various wet media including acrylic, tempera, and watercolor. Different styles of art will be explored while building technique. ***This course will satisfy the fine arts requirement for graduation.***

Art II- IV- Ceramics **(FACR2) (FACR3)(FACR4)**
9th – 12th **1 credit**
Prerequisite: *Required* one credit of Art in the previous course
Course Description: This advanced course includes developing the skills learned in Art I through the use of clay. Different styles of hand-building pottery and sculpture will be explored while building technique. ***This course will satisfy the fine arts requirement for graduation.***

Art II – IV- Photography **(FAPH2) (FAPH3) (FAPH4)**
9th – 12th **1 credit**
Prerequisite: *Required* one credit of Art in the previous course
Course Description: Focuses on artistic expression through the photographic medium. Students will express their thoughts and improve their problem-solving skills by using their camera to compose artwork. Students learn film processing and printing techniques. Students will learn digital photo editing. Students must have personal camera. ***This course will satisfy the fine arts requirement for graduation.***

AP Art History **(FAAHAP)**
9th – 12th **1 credit**
Prerequisite*:* *None*
Course Description: The AP Art History course is equivalent to a two-semester introductory college course that explores the nature of art, art making, and responses to art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the course fosters in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content. They experience, research, discuss, read, and write about art, artists, art making, responses to, and interpretations of art. ***This course will satisfy the fine arts requirement for graduation***

AP Studio Art: 2-D Design **(FASAAP)**
10th – 12th **1 credit**
Prerequisite: Successful completion of Art II
Course Description: Students will learn to use 2-D design principles to organize an image on a picture plane in order to communicate content. They will demonstrate mastery through any two-dimensional medium or process, such as graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting and printmaking. They will also Develop technical skills and familiarize themselves with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. ***This course will satisfy the fine arts requirement for graduation.***

Music Appreciation (MUSI 1306) Dual Credit **(FAMADC)**
9th-12th **1 credit**
Prerequisite: *College eligibility per Blinn College guidelines*
Course Description: Understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances. (Does not apply to a music major degree.) ***This course will satisfy the fine arts requirement for graduation.*** **SUMMER ONLY**

BAND

Concert Band I – II **(FABN1/FABN1B) (FABN2/FABN2B)**
Symphonic Band I – II **(FACB1/FACB1B)(FACB2/FACB2B)**
Wind Ensemble I – II **(FAMSP1/FASB1B)(FAMSP2/FASB2B)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Band is a "performing arts" class. The purpose of band class is to increase understanding and appreciation of music through ensemble performance. The performing arts class requires time for public performance. There are some events in which the band will participate that are extracurricular, but the majority of band is curricular. Students must attend performances and rehearsals scheduled outside of class time. In order to meet the various levels of development of individual students, there are several band classes set up each semester. Each class has similar goals and criteria but utilizes music and exercises that best suit the current level of musical skills. Students without pre-existing band experience will be enrolled in Concert Band with director's approval. These students will participate in both fall/spring semester band activities. During the fall semester, marching band is a primary component of the curriculum for all band classes and therefore participation is required for enrollment in the band program. An evaluation of student's basic knowledge, tone, rehearsal skills, musicianship, and technical skill determine class (band) placement. **Fall – P.E. Substitution Credit/Spring – Fine Arts Credit**

Concert Band III - IV **(FACB3) (FACB4)**
Symphonic Band III - IV **(FASB3) (FASB4)**
Wind Ensemble III – IV **(FABN3) (FABN4)**
11th – 12th **1 credit**
Prerequisite: *Required* Band I and Band II
Course Description: Band is a "performing arts" class. The purpose of band class is to increase understanding and appreciation of music through ensemble performance. The performing arts class requires time for public performance. There are some events in which the band will participate that are extracurricular, but the majority of band is curricular. Students must attend performances and rehearsals scheduled outside of class time. In order to meet the various levels of development of individual students, there are several band classes set up each semester. Each class has similar goals and criteria but utilizes music and exercises that best suit the current level of musical skills. Students without pre-existing band experience will be enrolled in Concert Band with director's approval. These students will participate in both fall/spring semester band activities. During the fall semester, marching band is a primary component of the curriculum for all band classes and therefore participation is required for enrollment in the band program. An evaluation of student's basic knowledge, tone, rehearsal skills, musicianship, and technical skill determine class (band) placement. This course will satisfy the fine arts requirement for graduation.

Instrumental Techniques **(FAAPM)**
9th – 12th **1 credit**
Prerequisite: Concurrent enrollment in Concert, Symphonic, or Wind Ensemble Band
Course Description: Student will receive an intense study of his or her instrument through one on one instruction. The student will receive a private lesson at least once a week during the applied music class. The student will spend the remainder of class working independently to prepare for his or her next lesson. Students will also receive advanced instruction in the use of music based computer programs, music history, and music theory. Students enrolled in this class will be required to prepare an audition for the region band as well as prepare for all solo contests. To enroll the student must have teacher approval and must also be enrolled in at least one concert band class.

Jazz Ensemble I – IV **(FAJB1) (FAJB2) (FAJB3) (FAJB4)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Jazz Band is a "performing arts" class. Through ensemble performance and rehearsal, students will gain knowledge of the jazz idiom. Within the context of jazz music, students will be given opportunities to experiment with creative improvisation and solo performances. Students will be exposed to musical history and theory as it pertains to jazz music. These students will participate in both fall/spring semester band activities. During the fall semester, marching band is a primary component of the curriculum for all band classes and therefore participation is required for enrollment in the band program. An evaluation of student's basic knowledge, tone, rehearsal skills, musicianship, and technical skill determine class (band) placement. Concurrent enrollment in a band course or band/director approval

Fall Color Guard/Winter Guard I - II **(FAMCG1/FACG1B)(FAMCG2/FACG2B)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: The color guard utilizes various equipment and props to enhance the visual presentation of the marching band. Members will learn various dance movements and choreography during the course of the season. All students are welcome to audition for both the fall and winter color guards. Auditions for fall color guard will take place in the spring preceding the upcoming school year. Auditions for winter color guard will be at the conclusion of the marching season. Winter color guard performs choreography in a gym to recorded music. While classes are assigned during the day for rehearsal, students must also attend performances and rehearsals scheduled outside of class time. ***Fall – P.E. Credit/Spring – Fine Arts Credit***

Fall Color Guard/Winter Guard III – IV **(FACG3) (FACG4)**
11th – 12th **1 credit**
Prerequisite: Fall Color Guard/Winter Guard II
Course Description: The color guard utilizes various equipment and props to enhance the visual presentation of the marching band. Members will learn various dance movements and choreography during the course of the season. All students are welcome to audition for both the fall and winter color guards. Auditions for fall color guard will take place in the spring preceding the upcoming school year. Auditions for winter color guard will be at the conclusion of the marching season. Winter color guard performs choreography in a gym to recorded music. While classes are assigned during the day for rehearsal, students must also attend performances and rehearsals scheduled outside of class time.

CHOIR

Chorale I - IV– Varsity **(FAAC1) (FAAC2) (FAAC3) (FAAC4)**
9th – 12th **1 credit**
Prerequisite: Director Approval
Course Description: Chorale is a competitive mixed choir comprised of serious and dedicated advanced musicians who are devoted to the success of the choir by participating in co-curricular programs and extracurricular contests. The purpose of the class is to give students an increased understanding and appreciation of choral music through ensemble performance. This ensemble requires time outside of class for rehearsals and performances that are mandatory, included in the curriculum and is essential to the learning process. Uniforms will be provided by WHS for rental to be paid by students. Also, purchase of a uniform shirt is required. ***This course will satisfy the fine arts requirement for graduation.***

Treble Choir I - IV – Junior Varsity **(FATC1) (FATC2) (FATC3) (FATC4)**
9th – 12th **1 credit**
Prerequisite: Director Approval
Course Description: Treble Choir is a competitive women's choir comprised of serious and dedicated musicians who are devoted to the success of the choir by participating in co-curricular programs and extracurricular contests. The purpose of the class is to give students an increased understanding and appreciation of choral music through ensemble performance. This ensemble requires time outside of class for rehearsals and performances that are mandatory, included in the curriculum and is essential to the learning process. Uniforms will be provided by WHS for rental to be paid by students. Also, purchase of a uniform shirt is required**.** ***This course will satisfy the fine arts requirement for graduation.***

Concert Women's Choir I - IV– Non-Varsity **(FAWC1)(FAWC2)(FAWC3)(FAWC4)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Concert Women's Choir is a choir comprised of beginning or inexperienced female students who desire to participate in a performing ensemble. The purpose of the class is to give students a fundamental understanding and appreciation of choral music through ensemble performance. Concert Women's Choir members must attend rehearsals and performances outside of school hours as scheduled by the director, which are included in the state mandated curriculum for a fine arts credit. Uniforms will be

provided by WHS for rental to be paid by students. Also, purchase of a uniform shirt is required. ***This course will satisfy the fine arts requirement for graduation.***

Concert Men's Choir I - IV– Non-Varsity **(FACH1)(FACH2)(FACH3)(FACH4)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Concert Men's Choir is a choir comprised of beginning or inexperienced male students who desire to participate in a performing ensemble. The purpose of the class is to give students a fundamental understanding and appreciation of choral music through ensemble performance. Concert Men's Choir members must attend rehearsals and performances outside of school hours as scheduled by the director, which are included in the state mandated curriculum for a fine arts credit. Uniforms will be provided by WHS for rental to be paid by students. Also, purchase of a uniform shirt is required**. *This course will satisfy the fine arts requirement for graduation.***

Music Appreciation **(FAFUM)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: This course is specifically designed for students who need a Fine Arts Credit, but don't find themselves to be the performer type. Students will learn beginning skills in the following areas: Music Theory, Music History, the various types of Instruments, Important Composers, and Vocal Technique. This class will also serve as a Technical Team to the Choral Department. Students will learn how to operate all mechanical systems in the WHS Auditorium, set up and tear down the stage, etc. so they can assist during the Choir Concerts. Students who take this course will learn to appreciate Music without having to perform, but rather by attending Concerts and supporting the performers. ***This course will satisfy the fine arts requirement for graduation.***

Music Theory AP **(FAPMUS)**
11th-12th **1 credit**
Prerequisite: *Required* At least one year in advanced Choir or Band
Course Description: The AP Music Theory course is designed to develop a student's ability to aurally and visually analyze the basic concepts and processes of music. This is achieved by incorporating lessons, assignments, and creative projects that cultivate the aural, sight-singing, compositional and analytical skills of students. Throughout the course, students will complete excerpts from sample exams found in the *AP Music Theory Course Description Book.* Students will complete the sample multiple choice questions, free-response and the sight-reading exercises. In the weeks leading up to the exam, students will complete College Board released exams. Through lectures, analyses, and sample exams students will compile a comprehensive lexicon of theory terms and concepts that will be used as a final review for the AP Music Theory Exam. Students who successfully complete the AP Music Theory Exam, and plan to major in music in college, may be able to enroll in an advanced music theory course, depending upon the individual college's policy. ***This course will satisfy the fine arts requirement for graduation.***

DANCE

Dance I **(FADN1)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Focuses on fundamental skills in the following dance techniques: ballet, modern jazz, lyrical, tap, folk, character, and ethnic. Students will develop creative expression through movement using improvisation, exploration of basic concepts and movement problems. Students will develop an awareness of space, time, and energy as design factors in dance technique and composition. Students will develop self-confidence through the use of the body as an expressive instrument. Most importantly, students will gain an appreciation of dance as an art form through viewing performances on tape and live performances. Students will learn the history of various dance styles. Student is required to perform a dance choreographed by the teacher. One outside performance a semester is required. Each student will also be asked to choreograph a complete dance during the second semester. ***This course will satisfy the fine arts requirement for graduation.***

Dance II **(FADN2)**
9th – 12th **1 credit**
Prerequisite: *Required* Dance I
Course Description: Students will acquire intermediate skills and increase their kinesthetic awareness in all above Dance I areas. One outside performance a semester is required. Each student will also be asked to choreograph a complete dance during the second semester. ***This course will satisfy the fine arts requirement for graduation.***

Dance III **(FADN3)**
10th-12th **1 credit**
Prerequisite: *Required* Dance II
Course Description: Students will continue mastering dance skills through advanced movements. They will develop musically in

performing dance techniques for performances, analyze dance styles and understand the relationship of the art forms. One outside performance a semester is required. Each student will also be asked to choreograph a complete dance during the second semester. ***This course will satisfy the fine arts requirement for graduation.***

Dance IV **(FADN4)**
11th-12th **1 credit**
Prerequisite: *Required* Dance III
Course Description: Students will acquire advanced skills in all dance techniques and create efficiency of movements through kinesthetic awareness, muscle memory, and visual recall. The students will choreograph a complete movement statement, present movement study in performance, evaluate movement ideas and express concrete or abstract ideas in movement. Students will explore the history of dance as it relates to other art forms. One outside performance a semester is required. Each student will also be asked to choreograph a complete dance during the second semester. ***This course will satisfy the fine arts requirement for graduation.***

Drill Team I **(FADTM1)**
9th – 12th **1 credit**
Prerequisite: *Audition*
Course Description: Prepare for performances during the fall at football and basketball games, various parades, and various intense competitions as well as spring show during the second semester. Wranglerettes act as a marching-drill unit, promote school spirit, build character, and encourage sportsmanship. The members of this organization are expected to perform and compete the entire year. Members shall be enrolled in drill team class entire year—the director must approve exception. Before/after school practice is required. ***PE Substitution Credit***

Drill Team II, III & IV **(FADTM2)(FADTM3)(FADTM4)**
10th – 12th **1 credit**
Prerequisites*: Required* Drill Team I; Audition
Course Description: Prepare for performances during the fall at football and basketball games, various parades and various intense competitions as well as spring show during the second semester. Wranglerettes act as a marching-drill unit, promote school spirit, build character, and encourage sportsmanship. The members of this organization are expected to perform and compete the entire year. Members shall be enrolled in drill team class entire year-the director must approve exception. Before/after school practice is required. ***This course will satisfy the fine arts requirement for graduation.***

Pre-Drill/JV Training **Year 1- PE Substitution Credit (FAJVD)**
9th – 12th **1 credit** **Year 2- Dance 1 Fine Arts Credit (FAJVD1)**
Prerequisites: *Audition* **Year 2-Dance 2 Fine Arts Credit (FAJVD2)**
Course Description: This class will focus on preparing students for drill team tryouts. Different dance technical skills will be learned. Students will learn stretching to improve flexibility for splits, leaps, kicks, high kick techniques, precision in pom, and jazz. Strength and conditioning will also be included in this course. Outside performances are required.

Dance Performance Ensemble I - IV **(FADPE1)(FADPE2)(FADPE3)(FADPE4)**
9th – 12th **1 credit**
Prerequisite*: None*
Course Description: Intense interdisciplinary program that combines performance elements such as dance, music, costume, and theatrical design with performance opportunities for smaller dance ensembles.

THEATRE

Theatre Production I – IV **(FATP1)(FATP2)(FATP3)(FATP4)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Theatre Production class focuses on the acting side of theatre. Students will have an opportunity to explore all performance aspects of theatre including, but not limited to; auditioning, acting, technical theatre, theatre evaluation and theatre careers. Participation in public performances is a requirement of this course. Students are required to participate in at least one production per semester, including after school rehearsals and performances. Enrollment in this course is required for participation in the UIL One Act Play Contest. This course may be repeated for credit. ***This course will satisfy the fine arts requirement for graduation.***

Technical Theatre I **(FATT1)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Technical Theatre gives students an opportunity to explore what goes on behind-the-scenes in the world of theatre. This course will explore a variety of technical theatre areas including basic sound and lighting principles, set and prop design, makeup design and application, and costuming. ***This course will satisfy the fine arts requirement for graduation.***

Technical Theatre II-IV **(FATT2)(FATT3)(FATT4)**

10th – 12th **1 credit**

Prerequisite: *Recommended* Technical Theatre I

Course Description: This course focuses on the production of and preparation for specific plays produced by the Waller High School Theatre Department with respect to sound, lighting, set building, properties construction, costuming and makeup. Advanced students may also focus on areas of specific interest such as sound, lighting, costuming, set design, makeup design, publicity, playwriting, script analysis and dramaturgy. ***This course will satisfy the fine arts requirement for graduation.***

SKILLS DEVELOPMENT

Office Aide/Teacher Aide **(OFAID)**
12th **½ -1 credit**
Prerequisite: Senior standing; Office and/or teacher approval; No discipline referrals or failing grades
Course Description: Students should have the willingness and ability to perform the skills and duties assigned. Students will be removed from the position of Office Aide if he or she receives any disciplinary action or takes advantage of the privilege or confidential nature of the position. Teacher Aides are assigned to one or more teachers and do not rotate. Students can only be an office aide one period of the day. ***This course is for local credit and will not count towards graduation.***

Leadworthy The Course **(LDWRTY)**
9th – 12th **½ credit**
Prerequisite*: None*
Course Description: Leadworthy is a program in which students develop leadership, professional, and business skills. They learn to develop a healthy self-concept, healthy relationships, and learn to understand the concept of personal responsibility. They will develop an understanding of Emotional Intelligence and the skills it measures, which include self- awareness, self-control, self-motivation, and social skills. Students will develop skills in public speaking and communication and an understanding of personal image. They will develop an understanding of the concept of principle- based decision- making and learn to make responsible financial decisions. They will develop an understanding of the effects of peer pressure and will develop skills to counteract those effects.

Texas Virtual School
Network 9th – 12th
Prerequisite: *None*
Course Description: Texas Virtual School Network is a web-based learning initiative designed to meet the needs of secondary public, private, and charter schools in Texas. Its current curriculum includes core subjects, electives, and Advanced Placement courses, all aligned to state TEKS. Please visit texasvirtualschool.org for more info. Payment of the tuition costs for the Texas Virtual Network courses will be the responsibility of the student. Courses will be offered during the summer for early graduates. Only courses that are not offered at WHS will be available during the school year. **Prior to enrollment in TxVSN, students shall make a written request to the counselor to enroll in the course.**

Early Release/Late Arrival **(LEARLY/LATEYR)**
Seniors, whose parents request early release/late arrival and who are approved, may be allowed to either arrive on campus 1 class period late or leave campus 1 class period early. Students receiving approval for early release/late arrival must have reliable transportation to leave or arrive at the approved time, every day. Students should not return to the campus unless they have tutoring (must have a pass from the teacher), need to take a make-up test at the end of the day (must have a pass from the teacher), or participate in an extracurricular activity that meets or practices at the end of the day, such as athletics, band, choir, d drill team, club, etc. In addition, students approved for early release/late arrival may also attend school functions such as ball games, theater, music performances, dances and banquet. **Additionally, students must have an application approved.**

Double Early Release/ Double Late Arrival/Early AND Late Arrival **(LEARY2/LATEY2)**
Seniors, whose parents request early release/late arrival and who are approved, may be allowed to either arrive on campus 2 class periods late or leave campus 2 class period early or have one period of each. Students receiving approval for early release/late arrival must have reliable transportation to leave or arrive at the approved time, every day. Students should not return to the campus unless they have tutoring (must have a pass from the teacher), need to take a make-up test at the end of the day (must have a pass from the teacher), or participate in an extracurricular activity that meets or practices at the end of the day, such as athletics, band, choir, drill team, club, etc. In addition, students approved for early release/late arrival may also attend school functions such as ball games, theater, music performances, dances and banquet. **Additionally, to have multiple release periods students must be on track to earn an Endorsement, meet all STAAR EOC requirements, and have an application approved.**

CAREER AND TECHNICAL

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Agricultural Technology and Mechanical Systems

Statewide Program of Study

The Applied Agricultural Engineering program of study explores the occupations and educational opportunities associated with applying knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing agricultural products. This program of study may also include exploration into diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.

Secondary Courses for High School Credit

Level 1
- Principles of Agriculture, Food, and Natural Resources

Level 2
- Agricultural Mechanics and Metal Technologies/Lab

Level 3
- Agricultural Structures Design and Fabrications/Lab

Level 4
- Agricultural Equipment Design and Fabrication/Lab
- Practicum in Agriculture – Ag Mech Pathway

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- AWS Certified Welder
- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding
- AWS SENSE Level 1: Entry Welder
- OSHA General 30*

*IBC sunsetting 8/31/24

Aligned Occupations

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

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

Texas Education Agency

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Agriculture Business, Leadership, & Communications

Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1

- Principles of Agriculture, Food, and Natural Resources

Level 2

- Professional Standards in Agribusiness
- Professional Communications

Level 4

- Practicum in Agriculture, Food, and Natural Resources
- Career Preparation I

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Microsoft Office Specialist: Microsoft Excel Expert (Excel and Excel 2019)

- Microsoft Office Specialist Excel*

*IBC sunsetting 8/31/24

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

- Agricultural Business and Management, General
- Finance, General
- Financial Mathematics
- Marketing/ Marketing Management, General

Master's, Doctoral, and Professional Degrees

- Agricultural Business and Management, General
- Finance, General
- Financial Mathematics
- Marketing/ Marketing Management, General

Aligned Occupations

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

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

TEA Texas Education Agency

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Animal Science
Statewide Program of Study

The Animal Science program of study focuses on the science, research, and business of animals and other living organisms. It teaches CTE learners how to apply biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students may also research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.

Secondary Courses for High School Credit

Level 1
- Principles of Agriculture, Food, and Natural Resources

Level 2
- Small Animal Management
- Equine Science

Level 3
- Livestock Production/Lab

Level 4
- Advanced Animal Science
- Veterinary Medical Applications/Lab
- Practicum in Agriculture, Food, and Natural Resources

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Elanco Fundamentals of Animal Science Certification
- Elanco Veterinary Medical Applications Certification
- Equine Management & Evaluation Certification

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Animal Breeders	$39,139	28	9%
Animal Scientists	$57,533	22	12%
Medical Scientists	$63,898	435	27%
Veterinarians	$93,496	294	24%
Zoologists and Wildlife Biologists	$67,309	45	32%

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

TEA Texas Education Agency

Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life - food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Plant Science
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Agriculture, Food, and Natural Resources

Level 2
- Landscape Design and Management
- Turf Grass Management

Level 3
- Floral Design/Lab
- Horticultural Science/Lab

Level 4
- Advanced Plant and Soil Science
- Advanced Floral Design

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Agricultural Biotechnology
- BASF Plant Science Certification
- Commercial/Non-Commercial Pesticide Applicator
- Commercial/Noncommercial Pesticide Applicator "Vegetation Management" License
- Horticulture - Landscaping - Job Ready
- Landscape Irrigator
- Principles of Floral Design Certification
- Production Agriculture - Job Ready
- Texas Certified Landscape Associate (TCLA)
- Texas Certified Nursery Professional
- Texas State Florist's Association Knowledge Based Floral Certification
- Texas State Florist's Association Level I Floral Certification
- Texas State Florist's Association Level II Floral Certification

Aligned Occupations

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

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

TEA Texas Education Agency

AGRICULTURE, FOOD AND NATURAL RESOURCES

Professional Communications **(CTATPC)**
9th – 12th **½ credit**
Prerequisite: *None*
Course Description: Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communications. 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.

Principles of Agriculture, Food, and Natural Resources **(CTAFNR)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: 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 an skills in a variety of settings.

Agriculture Mechanics and Metal Technologies **(CTAMMT)**
10th – 12th **1 credit**
Prerequisite: *Recommended* Principles of Agriculture, Food, and Natural Resources
Course Description: 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. Students will be screened and selected for this course and student enrollment is limited. Criteria and equitable practices will be used to determine student eligibility and students will be notified.

Horticultural Science **(CTAHOT)**
10th – 12th **1 credit**
Prerequisite: *None*
Course Description: 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.

Livestock Production **(CTALSP)**
10th – 12th **1 credit**
Prerequisite: *None*
Course Description: 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.

Equine Science **(CTEQSC)**
10th -12th **1/2 credit**
Prerequisite: *None*
Course Description: 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.

Small Animal Management **(CTSAMG)**
10th-12th **1/2 credit**
Prerequisite*: None*
Course Description: 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.

Floral Design **(CTAFLP)**
9th – 12th **1 credit**
Prerequisite: *Required* Program Fees (Estimated $50)*
Course Description: 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. ***Students may earn a certification. ****Financial Assistance available for those in need. ***This course will satisfy the fine arts requirement for graduation.***

Advanced Floral Design **(CTAAF)**
11th – 12th **1 credit**
Prerequisite: *Recommended* Floral Design/ *Required* Program Fees (Estimated $50)*
Course Description: In this course, students build on the knowledge from the Floral Design course and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced floral design and providing students with a thorough understanding of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of a specific occasion or event. Through the analysis and evaluation of various occasion and event types, students explore the design needs and expectations of clients and propose and evaluate appropriate creations. From conception to evaluation, students are challenged to create and design appropriate specialty floral designs that meet the needs of the client. Furthermore, an emphasis on budgetary adherence and entrepreneurship equips students with many of the necessary skills needed for success in floral enterprises.

Professional Standards in Agribusiness **(CTPSAG)**
10th - 12th **½ credit**
Prerequisite: *None*
Course Description Professional Standards in Agribusiness primarily focuses on leadership, communication, employer-employee relations, and problem solving as they relate to agribusiness. To prepare for careers in agribusiness systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to leadership development and the workplace, and develop knowledge and skills regarding agricultural 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 **(CTAWIL)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description Wildlife, Fisheries, and Ecology Management examines the management of game and non-game wildlife species, fish, and aqua crops and their ecological needs as related to current agricultural practices. To prepare for 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. *Students may earn a Hunter's Safety Certification.*

Agricultural Structures Design & Fabrication **(CTASDF)**
11th-12th **1 credit**
Prerequisite: *Recommended* Ag Mechanics and Metal Technologies

Course Description: 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. ***Students will construct metal projects for exhibition.***

Agriculture Equipment Design and Fabrication/Agricultural Laboratory and Field Experience (CTAEDL)
11th-12th 2 credits
Prerequisite: *Recommended* Ag Mechanics and Metal Technologies
Course Description: In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. ***Students will construct metal projects for exhibition.***

Veterinary Medical Applications (CTAVMA)
11th– 12th 1 credit
Prerequisite: *Required* Equine, Small Animal Management, or Livestock Production.
Course Description: 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. ***Upon completion of course, students have the option to pursue their Certified Veterinary Assistant certification. This entails working in a Veterinary Office under the supervision of a Licensed Veterinarian. More information on this certification will be given to students by their teacher.***

Landscape Design & Management (CTALDD)
10th – 12th ½ credit
Prerequisite: *None*
Course Description: Landscape Design and Management is designed to develop an understanding of landscape design and management 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.

Turf Grass Management (CTTGMG)
10th – 12th ½ credit
Prerequisite: *None*
Course Description: Turf Grass Management is designed to develop an understanding of turf grass management 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.

Advanced Animal Science (CTAAAS)
11th – 12th 1 credit 4.0
Prerequisite: *Required* Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production; *Recommended* Veterinary Medical Applications.
Course Description: 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. To receive credit in science, students must meet the 40% laboratory and fieldwork requirement. ***This course satisfies the 3rd or 4th year science credit and is counted in the GPA as an academic elective.***

Advanced Plant and Soil Science (CTAAPS)
11th-12th 1 credit 4.0
Prerequisite: *Recommended* Biology, Integrated Physics and Chemistry, Chemistry, or Physics and a minimum of one credit from the courses in the Agriculture, Food, and Natural Resources Program of Study.
Course Description: 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. ***This course satisfies the 3rd or 4th year science credit and is counted in the GPA as an academic elective.***

Practicum in Agriculture- Ag Leadership and Communications Pathway or Ag Mechanics Pathway (CTPRAC)

11th & 12th **2 credits**

Prerequisite*: Recommended* a minimum of one credit from the courses in the Agriculture, Food, and Natural Resources Program of Study

Course Description: 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, mentor ships, 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. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Ag, Food, and Natural Resources Program of Study.

Career Prep

See Career Prep on pg.82

Architecture and Construction Career Cluster

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

Architectural Drafting & Design

Statewide Program of Study

The Architectural Design program of study explores the occupations and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study may also include exploration into collecting and interpreting geographic information, researching and preparing maps, and interior design.

Secondary Courses for High School Credit

Level 1
- Principles of Architecture

Level 2
- Architectural Design I

Level 3
- Architectural Design II

Level 4
- Career Preparation I

Postsecondary Opportunities

Associates Degrees
- Architecture
- Interior Design
- Civil Engineering, General
- Geographic Information Science and Cartography

Bachelor's Degrees
- Architecture
- Interior Design
- Civil Engineering, General
- Geographic Information Science and Cartography

Master's, Doctoral, and Professional Degrees
- Architecture
- Interior Architecture
- Civil Engineering, General
- Geographic Information Science and Cartography

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Shadow an architect, interior designer or civil engineer • Participate in SkillsUSA	• Intern at an architectural firm

Industry-Based Certifications

- Autodesk Associate (Certified User) 3ds MAX
- Autodesk Associate (Certified User & Professional) AutoCAD
- Autodesk Associate (Certified User & Professional) Fusion 360
- Autodesk Associate (Certified User) Revit Architecture
- Autodesk Associate (Certified User) Revit for Electrical
- Autodesk Associate (Certified User) Revit for Structural Design
- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional & Certified User in Civil 3D for Infrastructure Design
- Autodesk Certified Professional in Revit for Architectural Design
- Autodesk Certified Professional in Revit for Electrical Design
- Autodesk Certified Professional in Revit for Structural Design
- Certified SOLIDWORKS Associate (CSWA) – Electrical
- Certified SOLIDWORKS Associate (CSWA) & Professional (CSWP) – Academic
- Certified SOLIDWORKS Professional (CSWP) - Drawing Tools
- Certified SOLIDWORKS Professional (CSWP) - Model Based Definition
- Certified SOLIDWORKS Associate (CSWA) & Professional (CSWP)- Simulation
- Certified SOLIDWORKS Associate (CSWA- Sustainability
- LEED Green Associate

- Certified SOLIDWORKS Associate*
- Mastercam Associate Certification*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Architects	$77,043	808	16%
Geographic Information Analysts and Surveyors	$58,926	162	27%
Architectural/ Civil Drafters	$50,170	1,068	9%
Construction Managers	$87,402	2,401	14%

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

TEA Texas Education Agency

Architecture and Construction Career Cluster

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

Carpentry
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Construction
- Principles of Architecture

Level 2
- Construction Technology I

Level 3
- Construction Technology II

Level 4
- Practicum in Construction Technology
- Career Preparation I

Postsecondary Opportunities

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

Bachelor's Degrees
- Construction Science

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- NCCER Carpentry Level I
- NCCER Carpentry Level II
- NCCER Core

Aligned Occupations

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

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

TEA Texas Education Agency

Architecture and Construction Career Cluster

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

Electrical
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Construction

Level 2
- Electrical Technology I

Level 3
- Electrical Technology II

Level 4
- Practicum in Construction Technology
- Career Preparation I

Postsecondary Opportunities

Associates Degrees
- Electrician
- Communications Systems Installation and Repair Technology

Bachelor's Degrees
- Construction Science

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- NCCER Core
- NCCER Electrical Level I
- NCCER Electrical Level II

- Certified Electronics Systems Associate *
- Electrical Apprenticeship Certificate Level 1*
- ISCET Certified Electronics Technicians *
- OSHA 30 Hour Construction*
- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Aligned Occupations

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

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

TEA Texas Education Agency

Architecture and Construction Career Cluster

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

HVAC and Sheet Metal
Statewide Program of Study

The HVAC and Sheet Metal program of study explores the occupations and educational opportunities associated with installing, serving, or repairing heating and air conditioning systems and also the fabrication, assembly, installation, and repair of sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. This program of study may also include exploration into preparing cost estimates for certain construction projects involving heating and air conditioning and sheet metal.

Secondary Courses for High School Credit

Level 1
- Principles of Construction

Level 2
- Heating, Ventilation Air Conditioning (HVAC) and Refrigeration Technology I

Level 3
- Heating, Ventilation Air Conditioning (HVAC) and Refrigeration Technology II

Level 4
- Practicum in Construction Technology
- Career Preparation I

Postsecondary Opportunities

Associates Degrees
- Business Administration and Management, General
- Mechanical Engineering
- Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/ Technician
- Business/ Commerce, General

Bachelor's Degrees
- Business Administration and Management
- Mechanical Engineering
- Construction Engineering Technology/ Technician
- Business/ Commerce, General

Master's, Doctoral, and Professional Degrees
- Business Administration and Management
- Mechanical Engineering
- Construction Engineering
- Business/Commerce, General

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Shadow an HVAC worker or cost estimator • Participate in SkillsUSA	• Intern with an HVAC and/or sheet metal company

Industry-Based Certifications

- NCCER Core
- NCCER Heating, Ventilation, Air Conditioning Level I
- OSHA 30 Hour Construction*
- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Heating, Air Conditioning, and Refrigeration Mechanics	$41,808	3,356	26%
Sheet Metal Workers	$37,419	1,479	17%
Cost Estimators	$63,939	2,239	21%

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

TEA Texas Education Agency

ARCHITECTURE AND CONSTRUCTION

Principles of Architecture **(CTPARC)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: 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. Studies 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.

Principles of Construction **(CTPCON)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. *Students will earn NCCER Core Curriculum Certification*

Architectural Design I **(CTAADS)**
10th – 12th **1 credit**
Prerequisite: *Required* Algebra I and English I; *Recommended* Geometry, Principles of Architecture, and Principles of Construction.
Course Description: 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 include 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.

Architectural Design II **(CTADAD)**
11th – 12th **2 credits**
Prerequisite: *Required* Architectural Design I or Advanced Interior Design and Geometry; *Recommended* Principles of Architecture and Principles of Construction.
Course Description: 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.

Construction Technology I **(CTCTBT)**
10th – 12th **2 credits**
Prerequisite: *Recommended* Principles of Construction or Principles of Architecture
Course Description: In Construction Technology I, students will gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in safety, tool usage, building materials, codes, and framing. *Students will earn NCCER Carpentry I Industry Certification.*

Construction Technology II **(CTACBT)**
11th – 12th **2 credits**
Prerequisite: *Required* Construction Technology I.
Course Description: In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills. *Students will earn Shop Bot Level 1 Certification*.

Practicum in Construction Technology **(CTBTPR)**
12th **2 credits**
Prerequisite: *Required* Construction Technology II, Electrical Technology II or Heating, Ventilation and Air Conditioning (HVAC) and Refrigeration Technology II

Course Description: In Practicum in Construction Technology, students will be challenged with the application of gained knowledge and skills from Construction Technology I and II. In many cases students will be allowed to work at a job (paid or unpaid) outside of school or be involved in local projects the school has approved for this class.

Electrical Technology I **(CTET1)**
10th-12th **1 credit**
Prerequisite: *Recommended* Principles of Construction or Principles of Architecture
Course Description: In Electrical Technology I, students will gain knowledge and skills needed to enter the workforce as an electrician or building maintenance supervisor, prepare for a postsecondary degree in a specified field of construction or construction management, or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, and the reading of electrical drawings, schematics, and specifications.

Electrical Technology II **(CTET2)**
11th-12th **2 credit**
Prerequisite: *Required* Electrical Technology I. *Recommended*: Principles of Architecture or Principles of Construction
Course Description: 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.

Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology I **(CTHVA1)**
10th – 12th **1 credit**
Prerequisite: *Recommended* Principles of Architecture, Principles of Construction or Construction Technology 1
Course Description: In Heating, Ventilation, and Air Conditioning and Refrigeration Technology I, students will gain knowledge and skills needed to enter the industry as technicians in the HVAC and refrigeration industry or building maintenance industry, prepare for a postsecondary degree in a specified field of construction management, or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, principles of HVAC theory, use of tools, codes, and installation of HVAC and refrigeration equipment. Students may earn industry certifications.

Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II (pending board approval) **(CTHVA2)**
10th – 12th **2 credit**
Prerequisite: *Recommended* Principles of Architecture, Principles of Construction or Construction Technology 1
Course Description: In Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II, students will gain advanced knowledge and skills needed to enter the industry as HVAC and refrigeration technicians or building maintenance technicians or supervisors, 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, use of tools, codes, installation of commercial HVAC equipment, heat pumps, troubleshooting techniques, various duct systems, and maintenance practices.

Career Prep
See Career Prep on pg.82.

Arts, Audio/Video Technology, and Communications Career Cluster

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

Digital Communications
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Arts, Audio/Video Technology, and Communications
- Professional Communications

Level 2
- Audio/Video Production I/Lab

Level 3
- Audio/Video Production II/Lab

Level 4
- Practicum of Audio/Video Production
- Career Preparation I

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Adobe Certified Professional in Print and Digital Media Publication Using Adobe Premiere Pro
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe After Effects

Occupations and Wages

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

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

Arts, Audio/Video Technology, and Communications Career Cluster

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

Graphic Design & Interactive Media
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Arts, A/V Technology, and Communications
- Digital Media

Level 2
- Graphic Design and Illustration I
- Game Programming and Design

Level 3
- Graphic Design and Illustration II/Lab

Level 4
- Practicum in Graphic Design and Illustration
- Career Preparation I

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro
- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator
- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional In Visual Effects and Motion Graphics Using Adobe After Effects

- Adobe Certified Professional Animate*

*IBC Sunsetting 8/31/24

Postsecondary Opportunities

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

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

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

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

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

ARTS, A/V TECHNOLOGY, AND COMMUNICATION

Professional Communications **(CTATPC)**
9th – 12th **1/2 credit**
Prerequisite: *None*
Course Description: Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communications. 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.

Principles of Arts, Audio/Video Technology, and Communications **(CTPAAV)**
9th – 11th **1 credit**
Prerequisite: *None*
Course Description: Careers in the Arts, Audio/Video Technology, and Communications Program of Study 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.

Audio/Video Production **(CTAUVP)**
9th – 12th **1 credit**
Prerequisite: *Recommended* Principles of Arts, Audio/Video Technology, and Communications
Course Description: 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 Program of Study, students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video products.

Audio/Video Production II/Lab **(CTAVP2)**
11th – 12th **2 credits**
Prerequisite: *Required* Audio/Video Production I
Course Description: 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 Program of Study, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post- production products. This course may be implemented in an audio format or a format with both audio and video.

Practicum in Audio/Video Production **(CTPAVP)**
12th **2 credits**
Prerequisite: *Required* Audio/Video Production II and Audio/Video Production II Lab
Course Description: Careers in audio/video production span all aspects of the audio/video communications industry. 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 needed for success in the Arts, Audio/Video Technology, and Communications Program of Study, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, 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.

Game Programming and Design **(TACGPG)**
9th – 12th **1 credit**
Prerequisite: *Required* Algebra I
Course Description: 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. Students will create a computer game that is presented to an evaluation panel.

Digital Media **(CTDIME)**

9th – 12th **1 credit**

Prerequisite: *None*

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

Graphic Design and Illustration **(CTGD1)**

10th – 12th **1 credit**

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

Course Description: In Graphic Design, students will apply academic knowledge in art and design projects. Students will use personal information management, email, Internet, writing and publishing, and presentation applications for art and design projects. Laws regarding use and technology as well as cyber security procedures will also be applied. Students will conduct oral and written critiques of design while learning about the history of design. Students will create original two- or three- dimensional projects.

Graphic Design and Illustration II **(CTGD2)**

10th – 12th **2 credit**

Prerequisite: *Required* Graphic Design and Illustration I

Course Description: Course Description: Within this context, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills. Focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services. Students who enroll in this class are eligible for 3 hours dual credit with Blinn College. Students must complete an Apply Texas Application and submit the Dual Credit Application.
*Pending Blinn College Course number verification

Career Prep on pg. 82.

Business, Marketing, and Finance Career Cluster

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

Accounting and Financial Services
Statewide Program of Study

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

Secondary Courses for High School Credit

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

Level 2
- Accounting I

Level 3
- Accounting II

Level 4
- Practicum in Business Management
- Career Preparation I

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Accounting - Basic
- Accounting Foundations
- Intuit QuickBooks Certified User
- Specialist: Microsoft Excel Expert (Excel and Excel 2019)
- Microsoft Office Specialist-Excel*

*IBC sunsetting 8/31/24

Aligned Occupations

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

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

Business, Marketing, and Finance Career Cluster

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

Entrepreneurship
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Business, Marketing, and Finance

Level 2
- Business Information Management I

Level 3
- Entrepreneurship

Level 4
- Career Preparation I

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded-Learning Opportunities

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

Industry-Based Certifications

- Microsoft Office Specialist Excel Expert

Aligned Occupations

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

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

Business, Marketing, and Finance Career Cluster

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

Marketing & Sales
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Business, Marketing, and Finance

Level 2
- Sports and Entertainment Marketing
- Virtual Business

Level 3
- Retail Management
- Fundamentals of Real Estate

Level 4
- Career Preparation I

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Real Estate Sales Agent License

- Google Analytics Individual Qualification*
  *IBC sunsetting 8/31/24

Aligned Occupations

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

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

BUSINESS, MARKETING AND FINANCE

Principles of Business, Marketing and Finance **(CTPRMK)**
9th – 11th **1 credit**
Prerequisite: *None*
Course Description: 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.

Virtual Business **(CTVB)**
10th – 12th **.5 credit**
Prerequisite: *Recommended* Touch Systems Data Entry
Course Description: 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 book-keeping skills for a virtual business, maintain business records, and understand legal issues associated with a virtual business.

Sports and Entertainment Marketing **(CTSPET)**
9th – 12th **.5 credit**
Prerequisite: *Recommended* Principles of Business, Marketing and Finance
Course Description: Sports and Entertainment Marketing will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and entertainment. The areas this course will cover include basic marketing concepts, publicity, sponsorship, endorsements, licensing, branding, event marketing, promotions, and sports and entertainment marketing strategies.

Business Information Management I **(CTBM1)**
9th – 12th **1 credit**
Prerequisite: *Recommended* Touch Systems Data Entry
Course Description: 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.

Entrepreneurship **(CTENT)**
10th– 12th **1 credit**
Prerequisite: *Recommended* Principles of Business, Marketing, and Finance
Course Description: In Entrepreneurship, students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.

Money Matters **(CTMON)**
9th– 12th **1 credit**
Prerequisite: *Recommended* Principles of Business, Marketing, and Finance.
Course Description: In Money Matters, students will investigate money management from a personal financial perspective. 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.

Retail Management **(CTREMG)**
10th– 12th **1 credit**
Prerequisite: *Recommended* Principles of Business, Marketing, and Finance
Course Description: Retail management focuses on the distribution and selling of products to consumers using various vending points such as chain stores, department stores, stand-alone stores, and various online markets. The course highlights the everyday mechanisms

necessary to operate a successful retail establishment. The student is taught to evaluate methods for promoting merchandise, supervising employees, handling customer needs, and maintaining inventories.

Accounting I **(CTACT1)**
10th– 12th **1 credit**
Prerequisite: *Recommended* Principles of Business, Marketing, and Finance
Course Description: In Accounting I, students will investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information. Students will formulate and interpret financial information for use in management decision making.

Accounting II **(CTACT2)**
11th– 12th **1 credit** **4.0 GPA**
Prerequisite: *Required* Accounting I
Course Description: In Accounting II, students will continue the investigation of the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in various managerial, financial, and operational accounting activities. Students will formulate, interpret, and communicate financial information for use in management decision making. Students will use equations, graphical representations, accounting tools, spreadsheet software, and accounting systems in real-world situations to maintain, monitor, control, and plan the use of financial resources. ***This course satisfies the 3rd year math credit and is counted in the GPA as an academic elective.***

Fundamentals of Real Estate **(CTREAL)**
11th– 12th **2 credits**
Prerequisite: Recommended Principles of Business, Marketing, and Finance.
Course Description: This course contains the curriculum necessary to complete the pre-licensure education requirements of the Texas Real Estate Commission (TREC) to obtain a real estate salesperson license. Includes the following course materials: Principles of Real Estate I and II, Law of Contracts, Law of Agency, Real Estate Finance, and Promulgated Contract Forms. ***Students testing for certification will be responsible for paying their TREC application fee of $185.00, State Exam Fee of $43.00, and for their fingerprint and background check fees of $38.25.***
Requirements and Completion
Texas Real Estate Licensing consists of six individual courses within the program. The following courses and hours are as followed: 180 classroom hours of the following qualifying real estate courses

- Course # 121 - Principles of Real Estate I (30 hours)
- Course # 122 - Principles of Real Estate II (30 hours)
- Course # 1151 - Law of Agency (30 hours)
- Course # - 1251 - Law of Contracts (30 hours)
- Course # 351 - Promulgated Contract Forms (30 hours)
- Course # 451 - Real Estate Finance (30 hours)

Career Preparation I **3 credits** **15+ hours/week (CTCPE1)**
11th – 12th **2 credits** **10-14 hours/week- (CTCP12)**
Prerequisite: Employment must be secured within 15 days of enrollment in course and maintained throughout remainder of the course; Valid social security number
Course Description: Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. Stations must be available for instructor visitation once per nine weeks and no more than 30 minutes' drive time from the school campus. ***For a student participating in Career Preparation I, employment must begin within 15 school days of the student's enrollment date. Students requesting a schedule change into Career Preparation I during the schedule change window must already have employment at the time of the schedule change.*** *From the Student Attendance Accounting Handbook (Section 5.7): Each Career Preparation course must consist of student participation in career preparation training appropriate to the instructional program plus participation in related CTE classroom instruction. The course should span the entire school year, and classroom instruction must average one class period each day for every school week. A student is expected to*

be enrolled the entire school year; however, in accordance with local district policy, a student may enter or exit the course when extenuating circumstances require such a change. Documentation of extenuating circumstances will be required.

Career Preparation II **3 credits** **15+ hours/week- (CTCPE2)**
12th **2 credits** **10-14 hours/week- (CTCP23)**
Prerequisite: Required Career Preparation I; Employment must be secured within 15 days of enrollment in course and maintained throughout remainder of the course; Valid social security number
Course Description: Career Preparation II develops essential knowledge and skills through advanced classroom instruction with business and industry employment experiences. Career Preparation II maintains relevance and rigor, supports student attainment of academic standards, and effectively prepares students for college and career success***. For a student participating in Career Preparation II, employment must begin within 15 school days of the student's enrollment date. Students requesting a schedule change into Career Preparation II during the schedule change window must already have employment at the time of the schedule change.*** *From the Student Attendance Accounting Handbook (Section 5.7): Each Career Preparation course must consist of student participation in career preparation training appropriate to the instructional program plus participation in related CTE classroom instruction. The course should span the entire school year, and classroom instruction must average one class period each day for every school week. A student is expected to be enrolled the entire school year; however, in accordance with local district policy, a student may enter or exit the course when extenuating circumstances require such a change. Documentation of extenuating circumstances will be required.*

Practicum in Business Management **(CTPRBM)**
11th -12th **2 credits**
Prerequisite: *Recommended* Touch System Data Entry and Business Management or Business Information Management II
Course Description: 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.

Education and Training Career Cluster

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

Early Learning
Statewide Program of Study

The Early Learning program of study focuses on early childhood education, which consists of instructing and supporting preschool and early elementary school students in activities that promote social, physical and intellectual growth as well as in basic elements of science, art, music, and literature. This program of study introduces CTE learners to tasks necessary for planning, directing, and coordinating activities for young children.

Secondary Courses for High School Credit

Level 1
- Principles of Education and Training

Level 2
- Child Development

Level 3
- Instructional Practices

Level 4
- Practicum in Early Learning
- Career Preparation I

Postsecondary Opportunities

Associates Degrees
- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Kindergarten/Preschool Education and Training
- Psychology/Sociology

Bachelor's Degrees
- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Early Childhood
- Psychology/Sociology

Master's, Doctoral, and Professional Degrees
- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Educational, Instructional, and Curriculum Supervision
- Educational Leadership and Administration

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Educational Aide 1

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Kindergarten Teachers, except Special Education	$53,310	1,848	17%
Preschool Teachers	$27,851	4,330	17%
Elementary School Teachers	$54,140	13,121	16%
Education Administrators, Elementary and Secondary School	$79,830	2407	16%

Successful completion of the Early Learning program of study will fulfill requirements of the Public Service endorsement.

Revised – August 2022

TEA Texas Education Agency

Education and Training Career Cluster

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

Teaching and Training
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Education and Training

Level 2
- Child Development

Level 3
- Instructional Practices

Level 4
- Practicum in Education and Training
- Career Preparation I

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Educational Aide I

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

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

TEA Texas Education Agency

EDUCATION & TRAINING

Principles of Education and Training **(CTPEDT)**
9th – 10th **1 credit**
Prerequisite: *None*
Course Description: Principles of Education and Training is designed to introduce learners to the various careers available within the Education and Training Program of Study. Students use self-knowledge as well as educational and career information to analyze various careers within the Education and Training Program of Study. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.

Child Development **(CTCHDV)**
10th – 12th **1 credit**
Prerequisite: *Recommended* Principles of Human Services or Principles of Education and Training
Course Description: Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

Instructional Practices **(CTEDTR)**
11th- 12th **2 credits**
Prerequisite: *Required* At least one credit in a course from the Education and Training Program of Study. *Recommended* Principles of Education and Training, Human Growth and Development, or Child Development.
Course Description: Instructional Practices is a field-based (practicum) internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.

Practicum in Education and Training **(CTPRED)**
12th **2 credits**
Prerequisite: *Required* Instructional Practices; *Recommended* Principles of Education and Training
Course Description: 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.

Career Prep
See Career Prep on pg.82

Health Science Career Cluster

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

Diagnostics & Therapeutic Services
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Health Science

Level 2
- Medical Terminology

Level 3
- Health Science Theory
- Health Science Theory with Clinical
- Anatomy and Physiology
- Pathophysiology

Level 4
- Practicum in Health Science- Certified Nurse Aide (CNA)
- Practicum in Health Science- Emergency Medical Technician (EMT)
- Practicum in Health Science- Pharmacy Technician
- Practicum in Health Science- Ultrasound Technician

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Certified Cardiographic Technician
- Certified Clinical Medical Assistant
- Certified Nurse Aide (CNA)
- Emergency Medical Technician (EMT) - Basic

Postsecondary Opportunities

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

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

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

- Registered Diagnostic Medical Sonographer - Abdomen*
- Registered Diagnostic Medical Sonographer - Obstetrics and Gynecology*
- Registered Technologist - Cardiac-Interventional Radiography*
- Registered Technologist - Computed Tomography*
- Registered Technologist - Magnetic Resonance Imaging*
- Registered Technologist - Mammography*
- Registered Technologist - Nuclear Medicine Technology*
- Registered Technologist - Radiography*
- Registered Technologist - Sonography*
- Registered Technologist - Vascular Sonography*
- Registered Technologist - Vascular-Interventional Radiography*
- Registered Vascular Technology*

*IBC sunsetting 8/31/24

Aligned Occupations

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

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

TEA Texas Education Agency

HEALTH SCIENCE

Principles of Health Science **(CTPPHS)**
9th – 12th **1 credit**
Prerequisite: *Recommended grades 9-10*
Course Description: 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.

Medical Terminology **(CTMDTM)**
9th-12th **1 credit**
Prerequisite: *None*
Course Description: 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.

Anatomy and Physiology **(CTAPR)**
10th-12th **1 credit** **4.0**
Prerequisite: *Required* Biology and a second science credit; *Recommended* a course from the Health Science Program of Study.
Course Description: The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis. ***This course satisfies the 3rd or 4th year Science credit and is counted in the GPA as an academic elective.***

Pathophysiology **(CTPATH)**
11th-12th **1 credit** **4.0**
Prerequisite: *Required* Biology and Chemistry; *Recommended* a course from the Health Science Program of Study
Course Description: 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. Lab Fee is $5.00. ***This course satisfies the 3rd or 4th year Science credit and is counted in the GPA as an academic elective.***

Health Science Theory **(CTHSTY)**
10th-12th **1 credit**
Prerequisite: *Required* Biology
Course Description: 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. 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. Health Science courses must be taken in sequence to participate.

Health Science Theory with Clinical **(CTHSTH)**
10th - 12th **2 credits**
Prerequisite: *Required* Biology; Transportation to clinical site preferred
Course Description: 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. The Health Science Clinical course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development. Job shadowing off campus is incorporated for various clinical rotations. Health Science courses must be taken in sequence to participate in Job Shadowing. Students will be required to purchase liability insurance, scrubs and pay a $5.00 lab fee. Financial assistance may be available to those in need. Students will be screened and selected for this, and student enrollment is limited due to medical facility guidelines. Criteria and equitable practices will be used to determine student eligibility and students will be notified. *Currently our medical clinical sites require COVID vaccinations for all students to be in their facilities. While this is not a WHS requirement, students wishing to visit clinical sites must meet the facility's requirements. Alternately students may choose to take the Health Science Theory class without clinical rotations to meet the Practicum prerequisite.*

Practicum in Health Science- Certified Nurse Aide (CNA) **(CTHST2)**
12th **2 credits**
Prerequisite: *Required* Health Science Theory and Biology**;** Transportation to clinical site; Valid social security number or Tax ID and Texas Driver's License; Pass a mandatory background check, Program fees approximately $30.
Course Description: The Practicum in Health Science course is designed to give students practical application of previously studied

knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. This course is an occupational specific course designed to provide knowledge and skills for certification as a Certified Nurse Aide. Students will be required to purchase liability insurance, and scrubs. Students will be responsible for signing the Certified Nurse Aide Program Rules and Regulations the first week of class. Students will be screened and selected for this course and student enrollment is limited. Criteria and equitable practices will be used to determine student eligibility and students will be notified. ***Students may earn a certification***.

Practicum in Health Science- Pharmacy Technician (CTPHT)
12th 2 credits

Prerequisite: *Required* Health Science Theory and Biology**;** Transportation to clinical site; Valid social security number; Pass a mandatory background check; Random drug screening; Program fees (approximately $50).

Course Description: The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. This course is an occupational specific course designed to provide knowledge and skills for certification as a Certified Pharmacy Technician. Students will learn federal and state law pertaining to the pharmacy industry, drug classifications, medical terminology, ethical and legal issues, safety, aseptic technique, calculations, career opportunities, and pharmacy operations. Upon completion of the course, students will be eligible to test for national Certified Pharmacy Technician certification. The Pharmacy Technician certification provides the knowledge and skills needed to prepare, distribute, label and package pharmaceuticals, and to transcribe patients' medication profiles in specified records or forms. Students must be a senior to be enrolled in the course. Students must provide their own transportation to clinical rotations. Students will be screened and selected for this course and student enrollment is limited. Criteria and equitable practices will be used to determine student eligibility and students will be notified. ***Upon completion of the program, students with proof of a high school diploma will be eligible to sit for the board exam and become certified pharmacy technicians.*** Students will be responsible for signing Certified Pharmacy Technician Program Rules and Regulations the first week of class

Practicum in Health Science- Emergency Medical Technician (EMT) (CTEMT1)
12th 2 credits

Prerequisite: *Required* Health Science Theory and Biology; Transportation to clinical site; Valid social security number or Tax ID and Texas Driver's License; Pass a mandatory background check. Program fees (approximately $150)

Course Description: The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. This course is an occupational specific course designed to provide knowledge and skills for certification as a Emergency Medical Technician. Students will be responsible for signing the Program Rules and Regulations the first week of class. Students will be screened and selected for this course and student enrollment is limited. Criteria and equitable practices will be used to determine student eligibility and students will be notified***. Students may earn a certification.***

Practicum in Health Science- Ultrasound Technology (CTPULT)
12th 2 credits

Prerequisite: *Required* Health Science Theory, and Biology; Transportation to clinical site; Valid social security number; Pass a mandatory background check.

Course Description: This program will provide educational and clinical experience that result in extensive knowledge in ultrasound physics and instrumentation, use of Doppler imaging, and cross-sectional anatomy and pathophysiology in the abdomen, pelvis, obstetrics, gynecology, and superficial structures. Students will train in various medical facilities with experienced sonographers.

Hospitality and Tourism Career Cluster

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

Culinary Arts
Statewide Program of Study

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

Secondary Courses for High School Credit

Level 1
- Principles of Hospitality and Tourism

Level 2
- Introduction to Culinary Arts

Level 3
- Culinary Arts

Level 4
- Practicum in Culinary Arts

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- ServSafe Food Handlers
- ServSafe Manager

Aligned Occupations

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

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

Texas Education Agency

Hospitality and Tourism

Principles of Hospitality and Tourism **(CTHTPR)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.

Introduction to Culinary Arts **(CTICUL)**
9th – 10th **1 credit**
Prerequisite: *Recommended* Principles of Hospitality and Tourism
Course Description: 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. ***Student course fee is $25 for chef cap and SERV Safe Food Handler Certification.***

Culinary Arts **(CTHTCA)**
10th – 12th **2 credits**
Prerequisite: *Recommended* Principles of Hospitality and Tourism and Introduction to Culinary Arts
Course Description: 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. This course is offered as a laboratory-based course. ***Student course fee is $75 for chef's coat and cap with the ServeSafe Food Handler Certification. Fee is $30 if student already has a ServSafe certification.***

Practicum in Culinary Arts **(CTHPOA)**
11th-12th **2 credits**
Prerequisite: *Required* Culinary Arts
Course Description: 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. Instructions may be delivered through school- based laboratory training or through work-based delivery arrangements such as cooperative education, mentoring and job shadowing. ***Student course fee is $75 for chef's coat and cap with the ServSafe Food Handler Certification and Bulldog Café' t-shirt. Fee is $30 if student already has chef's coat and cap, Bulldog Café t-shirt and a ServSafe certification.***

Human Services Career Cluster

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.

Cosmetology and Personal Care Services
Regional Program of Study

The Cosmetology and Personal Care Services regional program of study introduces CTE learners to knowledge and skills related to providing beauty and personal care services. CTE concentrators may learn about or practice managing personal care facilities and coordinating or supervising personal service workers.

Secondary Courses for High School Credit

Level 1
- Introduction to Cosmetology

Level 2
- Cosmetology I/Lab

Level 3
- Cosmetology II/Lab

Level 4
- Career Preparation

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in TIVA or SkillsUSA	• Job shadow a cosmetologist • Work part-time at a salon, spa, or barbershop

Industry-Based Certifications

- Cosmetology Operator License

Postsecondary Opportunities

Certificate/License
- Certified Aesthetic Laser Operator
- Cosmetologist
- Certified Spa Supervisor
- Nail Technician/Specialist and Manicurist

Associates Degrees
- Cosmetology/Cosmetologist, General
- Aesthetician/Esthetician and Skin Care Specialist
- Salon/Beauty Salon Management/Manager
- Cosmetology, Barber/Styling, and Nail Instructor

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
First-Line Supervisors of Personal Service Workers	$36,941	1,634	24%
Barbers	$28,267	348	14%
Hairdressers, Hairstylists, and Cosmetologists	$21,507	3,489	22%
Manicurists and Pedicurists	$21,715	418	45%
Shampooers	$18,720	139	24%
Skincare Specialists	$26,437	637	22%

Successful completion of the Cosmetology and Personal Care Services regional program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022

HUMAN SERVICES

Principles of Human Services **(CTHSPP)**
9th – 12th **1 credit**
Prerequisite: *None*
Course Description: Principles of Human Services is a laboratory course that will enable students to investigate careers in the Human Services Program of Study, 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.

Child Development **(CTCHDV)**
10th – 12th **1 credit**
Prerequisite: *Recommended* Principles of Human Services or Principles of Education and Training.
Course Description: Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

Dollars and Sense **(CTDOLL)**
11th – 12th **½ credit**
Prerequisite: *Recommended* Principles of Human Services
Course Description: Dollars and Sense focuses on consumer practices and responsibilities, money-management processes, decision-making skills, impact of technology, and preparation for human services careers. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

Lifetime Nutrition and Wellness **(CTLNWS)**
9th – 12th **½ credit**
Prerequisite: *Recommended* Principles of Human Services, Principles of Hospitality and Tourism, or Principles of Health Science.
Course Description: 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 Guidance **(CTCGE1)**
10th-12th **2 credits**
Prerequisite: *Recommended* Principles of Human Services or *Recommended* corequisite Child Development
Course Description: Child Guidance is a technical laboratory course that addresses the knowledge and skills related to child growth and guidance equipping students to develop positive relationships with children and effective caregiver skills. Students use these skills to promote the well-being and healthy development of children, strengthen a culturally diverse society, and pursue careers related to the care, guidance, and education of children, including those with special needs. Instruction may be delivered through school-based laboratory training or through work-based delivery arrangements such as cooperative education, mentoring, and job shadowing.

Introduction to Cosmetology **(CTICOS)**
9th – 10th **1 credit**
Prerequisite: Program fees*
Course Description: In Introduction to Cosmetology, students explore careers in the cosmetology industry. To prepare for success. Students must have academic and technical knowledge and sills relative to the industry. Students many begin to earn hours toward state licensing requirements. Attendance is critical to the earning of the 1000 clock hours of supervised classroom instruction and demonstration needed before students qualify to take the state board test for licensing. ***Lab/kit/Uniform supplies fee (estimated $50) and a $25 permit fee are required***. *Financial assistance may be available if needed.

Cosmetology I **(CTCOS1)**
10th-11th **2 credits**
Prerequisite: *Recommended* Introduction to Cosmetology.
Course Description: 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. Attendance is critical to the earning of the monitored 1000 clock hours required for qualification for taking the state examination for licensing. **Lab/Kit/Uniform supplies fee (approx. $50) is required.** *Financial assistance may be available to those in need.

Cosmetology II **(CTCOS2)**

11th-12th **2 credits**

Prerequisite: *Required* Cosmetology I;

Course Description: 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. This course provides the final advanced training for employment in cosmetology careers. This course meets the Texas Department of Licensing and Regulation requirements for licensure upon completing the required 1000 clock hours of licensed instructor monitoring student classroom instruction/ application and a passing grade on the state examination. Good attendance is necessary to be successful in this lucrative career path training. ***Program fees* (Estimated $150).*** *Financial assistance may be available to those in need.

Career Prep

See Career Prep on pg.82

Law and Public Service Career Cluster

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

Law Enforcement
Statewide Program of Study

The Law Enforcement program of study teaches CTE learners about the development of, adherence to, and protection of various branches of law. Students will learn how to appropriately and legally respond to breaches in the law according to statutory rules and regulations as well as investigate how and why the breaches occurred.

Secondary Courses for High School Credit

Level 1
- Principles of Law, Public Safety, Corrections, and Security

Level 2
- Law Enforcement I

Level 3
- Law Enforcement II
- Correctional Services

Level 4
- Forensic Science

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join the Texas Public Service Association or local criminal justice clubs	• Attend court hearings and other legal procedures

Industry-Based Certifications

- Non-Commissioned Security Officer Level II License

Postsecondary Opportunities

Associates Degrees
- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Criminal Justice/Police Science
- Corrections
- Criminalistics and Criminal Science

Bachelor's Degrees
- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Criminal Justice/Police Science
- Juvenile Corrections
- Cyber/Computer Forensics and Counterterrorism

Master's, Doctoral, and Professional Degrees
- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Natural Resources
- Law Enforcement and Protective Services

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Police and Sheriff's Patrol Officers	$60,112	5,241	13%
Probation Officers and Correctional Treatment Officers	$44,054	793	9%
Correctional Officers and Jailers	$40,186	4,683	9%
Immigration and Customs Inspectors	$78,104	1,236	9%
First-Line Supervisors of Police and Detectives	$91,312	253	25%

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

LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

Principles of Law, Public Safety, Corrections, and Security **(CTPPLS)**
9th -12th **1 credit**
Prerequisite: *None*
Course Description: 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.

Law Enforcement I **(CTLAWF)**
10th – 12th **1 credit**
Prerequisite: *Recommended* Principles of Law, Public Safety, Corrections, and Security
Course Description: Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

Law Enforcement II **(CTLAW2)**
10th – 12th **1 credit**
Prerequisite: *Recommended* Law Enforcement I
Course Description: Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. Students will understand ethical and legal responsibilities, patrol procedures, first responder roles, telecommunications, emergency equipment operations, and courtroom testimony.

Correctional Services **(CTLCRS)**
10th - 12th **1 credit**
Prerequisite: *Recommended* Principles of Law, Public Safety, Corrections, and Security
Course Description: 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. ***Students that are 18 may be able to participate in on the job shadowing and training opportunities with local agencies.***

Forensic Science **(CTFORE)**
11th-12th **1 credit** **4.0**
Prerequisite: *Required* Biology, Integrated Physics and Chemistry (IPC), Chemistry or Physics
Course Description: Forensic Science is a survey course that introduces students to the application of science to law. Students learn terminology and procedures related to the collection and examination of physical evidence using scientific processes performed in a field or laboratory setting. Students also learn the history and the legal aspects of forensic science. *This course satisfies a 3rd or 4th year Science graduation requirement and will be counted in the GPA as an academic elective***.**

Manufacturing Career Cluster

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

Welding
Statewide Program of Study

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.

Secondary Courses for High School Credit

Level 1
- Introduction to Welding

Level 2
- Welding I

Level 3
- Welding II/Lab

Level 4
- Practicum in Manufacturing

Postsecondary Opportunities

Associates Degrees
- Certified Welder or Welder Inspector
- Machine Shop Technology/Assistant
- Operations Management and Supervision
- Occupational Safety and Health Technology/Technician

Bachelor's Degrees
- Welding Engineering Technology/Technician
- Biomedical Technology/Technician
- Operations Management and Supervision
- Environmental Health

Master's, Doctoral, and Professional Degrees
- Welding Engineering Technology/Technician
- Occupational Health and Industrial Hygiene
- Operations Management and Supervision
- Environmental Health

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate and compete in SkillsUSA • Job shadow a machinist	• Work in a local business or industry apprenticeship • Join the American Welding Society

Industry-Based Certifications

- API 1104 Welding Pipelines and Related Facilities
- AWS Certified Welder
- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding
- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Welders, Cutters, Solderers, and Brazers	$41,350	6,171	9%
Welding Soldering and Brazing Machine Setters, Operators and Tenders	$40,040	280	9%

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

Manufacturing Career Cluster

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

Robotics & Automation Technology
Statewide Program of Study

The Advanced Manufacturing and Machinery Mechanics program of study focuses on the assembly, operation, maintenance, and repair of electromechanical equipment or devices. CTE learners may work in a variety of mechanical fields, gaining knowledge and experience in robotics, refinery and pipeline systems, deep ocean exploration, or hazardous waste removal. CTE concentrators may work in a variety of fields of engineering.

Secondary Courses for High School Credit

Level 1
- Principles of Manufacturing
- Principles of Applied Engineering

Level 2
- Robotics I

Level 3
- Robotics II
- Introduction to Unmanned Aerial Vehicles Flight

Level 4
- Practicum in Manufacturing - Robotics

Postsecondary Opportunities

Associates Degrees
- Electromechanical Engineering/Technology
- Certified Quality Technician
- Industrial Mechanics and Maintenance Technology

Bachelor's Degrees
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

Master's, Doctoral, and Professional Degrees
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in SkillsUSA and local STEM events	• Work at a local business or industry apprenticeship • Join the American Welding Society

Industry-Based Certifications

- C-101 Certified Industry 4.0 Associate - Basic Operations
- C-103 Certified Industry 4.0 Associate - Robot System Operations
- C-200 Certified Industry 4.0 Automation System Specialist I - 216 Robotic System Integration 1
- C-200 Certified Industry 4.0 Automation Systems Specialist I - 208 Programmable Controller Troubleshooting 1
- C-200 Certified Industry 4.0 Automation Systems Specialist I - 215 Robotic Operations
- FAA Part 107 Remote Drone Pilot

- Industrial Technology Maintenance (ITM) - Electronic Control Systems*
- ISCET Certified Electronics Technicians*
- Mastercam Associate Certification Mill Design and Toolpaths*
- Mastercam Certified Professional Mill Level 1*
- Mastercam Professional Level Certification*
- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Electro-Mechanical Assemblers	$30,160	951	9%
Electro-Mechanical Technicians	$56,555	127	9%
Industrial Machinery Mechanics	$49,816	3,788	27%

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

ADVANCED MANUFACTURING AND MACHINERY MECHANICS (ROBOTICS)

Principles of Applied Engineering **(CTPENG)**
9th – 10th **1 credit**
Prerequisite: *None*
Course Description: Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will understand the various fields of engineering and will be able to make informed career decisions.

Principles of Manufacturing **(CTAPOM)**
9th – 12th **1 credit**
Prerequisite: *Recommended* Algebra I or Geometry
Course Description: In Principles of Manufacturing, students are introduced to knowledge and skills used in the proper application of principles of manufacturing. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities. Students will gain an understanding of what employers require to gain and maintain employment in manufacturing careers.

Robotics I **(CTROB1)**
9th-12th **1 credit**
Prerequisite: *Recommended* Principles of Applied Engineering
Course Description: Students enrolled in this course will demonstrate the knowledge and skills necessary for the robotic and automation industry. Through implementation of the design process, students will transfer advanced academic skills to component designs in a project-based environment. Students will build prototypes or use simulation software to test their designs. Additionally, students explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.

R**obotics II** **(CTROB2)**
10th – 12th **1 credit**
Prerequisite: *Required* Robotics I
Course Description: Robotics II students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs**. *This course satisfies a high school mathematics graduation requirement and will be counted in the GPA as an academic elective.***

Introduction to Unmanned Aerial Flight **(CTUMF)**
10th – 12th **1 credit**
Prerequisite: *None*
Course Description: The Introduction to Unmanned Aerial Vehicle (UAV) Flight course is designed to prepare students for entry-level employment or continuing education in piloting UAV operations. Principles of UAV is designed to instruct students in UAV flight navigation, industry laws and regulations, and safety regulations. Students are also exposed to mission planning procedures, environmental factors, and human factors involved in the UAV industry.

Practicum in Manufacturing- Robotics **(CTROPR)**
12th **2 credits**
Prerequisite: *None*
Course Description: 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.

MANUFACTURING-(WELDING)

Introduction to Welding **(CTIWEL)**
9th – 12th **1 credit**
Prerequisite: *Recommended or co-requisite*: Algebra I., Program Fees (Estimated $50)*
Course Description: Introduction to Welding will provide an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Students will be introduced to the three basic welding processes. Topics include industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. Introduction to Welding will provide students with the knowledge, skills, and technologies required for employment in welding industries. Students will develop knowledge and skills related to welding and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Knowledge about career opportunities, requirements, and expectations and the development of workplace skills will prepare students for future success.

Welding I **(CTWELD)**
10th-12th **2 credits**
Prerequisite: *Recommended* Algebra I, and Principles of Manufacturing, or Introduction to Welding; Program Fees (Estimated$50)*
Course Description: 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. ***Students may earn a certification.*** *Financial assistance may be available to those in need.

Welding II **(CTAWEL)**
11th – 12th **2 credits**
Prerequisite: *Required* Welding I; *Recommended* Algebra I or Geometry. Program Fees (Estimated $50)*
Course Description: 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. ***Students may earn a certification***. Financial assistance may be available to those in need.

Practicum in Manufacturing **(CTPRMF)**
12th **2 credits**
Prerequisite: *None*
Course Description: 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.

Career Prep
See Career Prep on pg.82

Science, Technology, Engineering, and Mathematics Career Cluster

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

Cybersecurity
Statewide Program of Study

The Cybersecurity program of study includes the occupations and educational opportunities related to planning, implementing, upgrading, or monitoring security measure for the protection of computer networks and information. This program of study may also include exploration into responding to computer security breaches and virus and administering network security measures.

Secondary Courses for High School Credit

Level 1
- Principles of Information Technology
- Fundamentals of Computer Science

Level 2
- Computer Science I
- AP Computer Science Principles

Level 3
- AP Computer Science A-Math
- AP computer Science B-LOTE

Level 4
- Independent Study in Technology Applications

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join TSA • Job shadow a computer system analyst or information security analyst	• Obtain a cybersecurity IBC

Industry-Based Certifications

- CompTIA A+ Certification
- Microsoft 365 Fundamentals

Postsecondary Opportunities

Associates Degrees
- System Networking, and LAN/WAN Management
- Information Technology
- Computer and Information Sciences, General
- Computer Science

Bachelor's Degrees
- Computer Systems Networking and Telecommunications
- Computer Systems Networking and Telecommunications
- Computer and Information Sciences, General
- Computer Science

Master's, Doctoral, and Professional Degrees
- Computer Systems Analysis/Analyst
- Information Technology
- Computer Information Sciences, General
- Computer Science

- Associate of (ISC)*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Information Security Analysts	$91,915	814	29%
Network and Computer System Administrators	$82,597	2,814	19%
Computer System Analysts	$87,568	5,937	29%

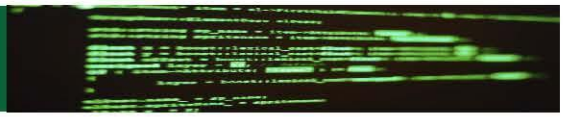
Successful completion of the Agribusiness program of study will fulfill requirements of the Business and Industry or STEM Endorsement if this math and science requirements are met. Revised – October 2022

Science, Technology, Engineering, and Mathematics Career Cluster

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

Programming and Software Development

Statewide Program of Study



The Programming and Software Development program of study explores the occupations and education opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer applications to run.

Secondary Courses for High School Credit

Level 1

- Fundamentals of Computer Science

Level 2

- AP Computer Science Principles
- Computer Science I
- Game Programming and Design

Level 3

- AP Computer Science A, MATH
- AP Computer Science A, LOTE
- Computer Science II

Level 4

- Computer Science III
- Career Preparation I
- Independent Study in Evolving/Emerging Technologies

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join TSA • Participate in coding club at school	• Obtain an industry-based certification

Industry-Based Certifications

- Certified Entry-Level Python Programmer (PCEP)
- CompTIA A+
- Oracle Certified Associate Java SE 8 Programmer

Postsecondary Opportunities

Associates Degrees

- Computer Programming/Programmer General
- Computer Software Engineer
- Computer Science
- Certified Software Analyst

Bachelor's Degrees

- Management Information Systems, General
- Computer Software Engineer
- Computer Science
- Information Science/ Studies

Master's, Doctoral, and Professional Degrees

- Computer Software Engineer
- Computer Science
- Information Science/ Studies

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Software Developer, Systems Software	$103,334	2,985	25%
Software Developers, Application	$104,499	6,311	30%
Computer Programmers	$79,893	1,454	9%

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

STEM

Principles of Information Technology **(CTPINF)**
9th–10th **1 credit**
Prerequisite: *None*
Course Description: In Principles of Information Technology, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

LOTE Computer Science I
See LOTE Computer Science I on page 48.

LOTE Computer Science I Honors
See LOTE Computer Science I Honors on page 48.

LOTE Computer Science II
See LOTE Computer Science II on page 48.

LOTE Computer Science II Honors
See LOTE Computer Science II Honors on page 48.

Computer Science II AP A -LOTE and Math
See Computer Science II AP A -LOTE and Math on page 48.

AP Computer Science Principles **(TACSPR)**
10th-12th **1 credit**
Prerequisite: *Recommended* Algebra I
Course Description: The course introduces the central ideas in computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. The students will develop computational artifacts and will think creatively while using simulations to explore various situations. The focus of the class is beyond the machine. The students will design and implement innovative solutions using an iterative process similar to what artists, writers, computer scientists, and engineers use. ***This course does not satisfy the mathematics credit required for graduation.*** This course provides an opportunity to earn college credit upon completion of the AP exam and receiving a score of 3 or higher.

Computer Science III **(CTACS3)**
11th-12th **1 credit**
Prerequisite: *Required* Computer Science II or Advanced Placement (AP) Computer Science A.
Course Description: Computer Science III 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 advanced computer science data structures through the study of technology operations, systems, and concepts.

Independent Study in Evolving/Emerging Technologies (Computer Science- Problems and Solutions) **(TACS4)**
9th – 12th **1 credit**
Prerequisite: *Recommended* a minimum of one credit from the Information Technology Program of Study
Course Description: In the Independent Study in Evolving/Emerging Technologies course, through the study of evolving/emerging technologies, including technology-related terms, concepts, and data input strategies, students will communicate information in different formats and to diverse audiences using a variety of technologies. Students will learn to make informed decisions, develop and produce original work that exemplifies the standards identified by the selected profession or discipline, and publish the product in electronic media and print. Students will demonstrate efficient acquisition of information by identifying task requirements, using search strategies, and using technology to access, analyze, and evaluate the acquired information. By using technology as a tool that supports 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. 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.

Appendix

GRADUATION PREPARATION

NINTH GRADE-CLASS OF 2028

Students in the ninth grade will take classes in English, Math, Social Studies, and Science. Suggested electives include courses in Fine Arts (choir, band, color guard, dance, theatre, and art), Athletics, AFJROTC or some CTE courses. If a student began the study of a Language Other Than English (LOTE) in junior high, it is strongly recommended that the study continue in the ninth grade. If a student has not yet begun the study of a Language Other Than English in middle school, the student must make a plan that will allow for the study of levels 1 and 2 in consecutive years.

Testing: End – of – Course (EOC) English I, Algebra I, Biology

Required courses: English I, Algebra I or Geometry, Biology & Social Studies (See Chart on Pg 4)

Ninth Grade Timeline (check off the items you have completed)

- _____Sign up to take the most challenging classes that you can.
- _____Get to know your counselor & other college resources available in your school.
- _____Talk to adults to see what they like/dislike about their jobs & what education is needed.
- _____Become involved in extracurricular activities.
- _____Start keeping all your report cards, certificates, etc.
- _____Become involved in volunteer activities and keep track of these.
- _____Start thinking about your dream career and check out career websites.
- _____Collect your personal information (log of volunteer activities, award, resume, etc.) in a file.
- _____Attend Career Day & College Night at WHS or elsewhere.
- _____Check out how to obtain college credit for classes taken in high school.
- _____Do your best on EOC exams.

GRADUATION PREPARATION

TENTH GRADE-CLASS OF 2027

Tenth grade students should ensure required classes from ninth grade are either successfully completed or included in this year's course requests. Select electives with an eye toward an ultimate career goal or college major. Tenth grade requirements include English II, US History, the next sequential math class, and the next sequential science class.

Testing: **Required** – End-of-Course (EOC) Testing in English II, US History
Recommended – PSAT (Practice SAT test)

Required courses: English II, Geometry or Algebra II, IPC, Chemistry or Physics & Social Studies

- _____Attend Career Day & College Night at WHS
- _____Check out how to obtain college credit for classes taken in high school.
- _____Continue 9th Grade activities and get involved in even more extracurricular activities.
- _____Keep up with your classes, grades are one of the top things universities consider.
- _____Start a savings account.
- _____Get to know your graduation plan; Plan your classes with your counselor Learn the difference between dual credit and AP.
- _____Become familiar with college entrance requirements.
- _____Do your best on EOC exams.
- _____Decide what leadership roles you would like to Consider Determine which graduation plan is right for you.
- _____Work on a four-year rough draft of high school courses you need/want to take
- _____Register for and take PSAT Test
- _____Research summer programs that focus on particular subjects, like science or math

Tenth Grade Timeline (check off the items you have completed)

GRADUATION PREPARATION

ELEVENTH GRADE – CLASS OF 2026

Eleventh grade students should carefully check required courses for graduation and make sure the proper courses have been selected. Any required courses not successfully completed should be included in this year's course requests. AP courses are also available in English, Science, Social Studies, foreign language, and some mathematics courses. Opportunities for dual credit in English and History are available. All selections should be made with an ultimate college major or career goal in mind.

Testing: **Recommended** – PSAT, SAT and ACT in spring (necessary for college application process for fall of senior year)

Required Courses: English III, 3rd Math, 3rd Science & Social Studies (See Chart on Pg. 74)

Eleventh Grade Timeline (check off the items you have completed)

August	_____Check to see that you're scheduled for the correct courses _____Continue 10th Grade extracurricular activities
September	_____Begin attending college sessions at your high school _____Search for the colleges /universities that you are interested in attending _____Prepare for the PSAT by reviewing practice tests
October	_____Attend Career Day & College Night at WHS _____Take the PSAT (Practice SAT) & use your results to help you prepare for the SAT
November	_____Set up a working résumé for yourself Visit the College & Career Center
December	_____Begin writing your personal essays for applications, scholarships, etc _____Learn how your GPA is computed
January	_____Research the colleges you are interested in to see if you will need to take SAT Subject specific tests _____Register and take ACT and/or SAT
February	_____Make sure you keep up with all of your community service hours _____Begin deciding on courses for senior year
March	____Compile your recommendation letters Narrow your college choices to 3 to 5 ____Take SAT School Day
April	_____Check that your graduation requirements are in order
May	_____Take the EOC test seriously. _____Study and take AP Exams
June	_____Last Chance to take ACT or SAT before senior year _____Visit the colleges you are interested in

GRADUATION PREPARATION

Reminder –All graduation requirements, including passing all parts of the End-of-Course (EOC) Tests, must be met before you can take part in the graduation ceremony.

TWELFTH GRADE – CLASS OF 2025

It is critical that each student and his or her parent carefully review the requirements for graduation and the student's transcript to ensure the proper classes are selected to meet graduation requirements. The counselor will work diligently with you to select the proper classes, but remember, your graduation is ultimately your responsibility. Opportunities to retake classes failed. during the senior year typically do not exist. Those classes must be made up outside of school hours, sometimes at considerable expense.

Testing:

- **Required** – End-of-Course (EOC) Tests, all parts (if not passed during 9th, 10th, or 11th grade year)
- **Recommended** – SAT, ACT, Texas Success Initiative (TSIA2) Exam (if needed), AP Tests, SAT Subject Tests (as appropriate)

Required Courses: 4th Year English, 4th Year Math, 4th Year Science & any other required course not previously passed.

By senior year, you need to have plans for post-graduation, and you need to make sure your selections adequately prepare you for your future plans.

- College – choose 3 to 5 schools: one dream school that may seem like a stretch, one sure thing, and several choices in between. Make sure you meet the admission requirements and are registered for the proper entrance exams. Apply early! Do not wait until just before the deadline or you may be too late.
- Technical school – check with several to make sure they have the kind of training you are seeking. Compare their cost of tuition, accreditations, job placement rates, and financial aid opportunities to determine what the best choice is for you.
- Military – talk to recruiters from several branches of the service. See which one offers you the best opportunities. Make an appointment to take the ASVAB and keep in touch with the recruiter of the branch you select.
- Work – make sure you have adequate job skills for a career with a future, not just a temporary job. See if the jobs you are considering offer incentives for furthering your education.

Twelfth Grade Timeline (check off the items you have completed)

August	____Make sure that you have the classes needed in your graduation plan and required at the college or university that you are planning to attend. ____Take as many challenging (possibly AP or Dual Credit) courses as you can. ___ Start college applications at https://www.applytexas.org/ or https://apply.commonapp.org/
September	____Keep a calendar with deadlines posted for easy visibility. ____Register and take ACT and/or the SAT if you have not done so! ____Difficulty paying for ACT or SAT registration fees? See about getting a fee waiver. ____Keep up with the College & Career newsletters throughout the year. ____Request your FAFSA ID at www.pin.ed.gov. ____Register for AP exams.
October	Attend Career Day & College Night at WHS. ____Check that you are scheduled to graduate at the end of the year. Meet ____with your Counselor early to discuss your plans, transcript requests, fee waiver, and letters of recommendation (2 weeks' notice). Be aware of College Early Decision or Early Admission deadlines. ____Apply early!

November	Check for scholarship opportunities in the College & Career Center, websites, etc. and complete and submit application forms before deadlines. ____Prepare your application carefully. Follow the instructions and pay close attention to deadlines! Be sure to ask your counselor and teachers at least two weeks before your application deadlines to submit the necessary documents to colleges (your transcript, letter of recommendation, etc.).
December	_____ Submit applications for college admission www.applytexas.org (Texas higher education institutions)/www.commonapp.org and housing (if applicable). ____Be ready to send out Mid-Year Reports in January. Begin the FAFSA (Free Application for Federal Student) at www.fafsa.ed.gov.
January	____Verify that the college admissions office has all your paperwork. ____Register for and take the ACT and SAT, and SAT Subject Tests, or any other exams required for admission to the colleges to which you are applying if you have not done so.
February	____Continue to check the status of your applications. ____Complete all necessary financial aid forms; check with the colleges you are applying to see if they have additional forms that need to be filled out. ____Check to see if you will need to fill out a CSS/Financial Aid Profile.
March	____Look for your Student Aid Report (SAR) in the mail. Pay particular attention to the Expected Family Contribution (EFC) and discuss it with your parents.
April	____Watch the mail for acceptance letters and financial aid award letters; compare the financial aid packages. ____Register for and take the Texas Success Initiative (TSIA-2) Exam if needed. ____Determine which college/university you will be attending. ____Finalize college housing arrangements and send a deposit to the college you choose.
May	____Study and take AP Exams. ____Inform each college of your acceptance or rejection of their offer of admission/financial aid by May 1. ____RSVP for summer orientation programs. ____Request final transcript to be sent to your college/university.
June	____Graduate! ____Review your financial aid package; determine if you will need additional money for college. ____Take part in summer orientation programs for incoming freshmen. ____See your academic advisor and register for classes.

Waller High School

Course Offerings Descriptions & Career Exploration Information

2024-2025

WALLER INDEPENDENT SCHOOL DISTRICT

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

It is the policy of Waller ISD not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973 as amended.