

Brenham High School

Course Catalog 2021-2022.

Take the next step.



Artwork by: Emmy Boyd - 10th Grade- Graphic Design Class



The course selection guide provides information to assist you as you make critically important decisions in planning your high school program, as well as post-graduation careers. This educational planning guide links the selection of courses with possible career pathways a student may pursue following graduation.

Decisions made in developing a high school program are critical. Choose wisely! Your future will be impacted by your choices, and we urge you to “stretch” yourself with challenging courses that stimulate and inspire you. Talk with your counselor, teachers, principal, and/or other administrators about your program, all are interested in helping you make choices that will be best for you.

You are encouraged to use this guide to design a course study which will lead to a professional future. Our society needs capable, self-motivated, life-long learners who will be productive members of our 21st century society. The Brenham High School program plays an important role in the education process, and we hope that all students will reap many benefits from their studies.

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FREQUENTLY ASKED QUESTIONS

What are some things I can do at home?

Be organized, and keep up with homework assignments and projects. Study class notes daily to review what was taught in class, even when you do not have assigned homework in a subject. Begin studying for a test several days ahead so you have time to review the material and retain it.

How can I make sure I'll do well in my classes?

Get organized early and stay that way. Don't wait to get help if you think you need it or are falling behind. Your teachers, your counselor, and your family will all be behind you and encouraging you to do your best work from the first day, but a lot of your success in high school depends on you!

If I am not doing well in a course, what should I do?

The first step is to speak with your classroom teacher and set up a time after school (or during school, depending upon your schedule) for extra help from your teacher. You also may sign up for student tutoring with your teacher or another teacher in that department. If you need additional suggestions, schedule an appointment with your counselor.

If I am failing a class, can I drop it mid-semester?

No. Dropping a class mid-semester is not an option.

How do I make up a course if I fail?

Courses can be made up during credit recovery during the summer. If more than one course is failed, then you may take credit recovery before or after school. The other credit recovery option includes a period during the school day, if you have flexibility in your schedule. See your counselor for more information.

If a student fails a course and retakes the course, is the first failed grade cancelled out?

No. Once a student earns a semester grade, it will never be removed from the academic record (transcript). Required courses must be retaken if failed.

When are final exams and how much do these grades count in my semester grades?

Final written exams are given the last few days of the semester. Students usually take two exams per day. Final exams are important and students should prepare for them. The exams count for 20% of the final semester grade.

What tests do I have to pass before I graduate?

You will take the STAAR End of Course tests when you complete the following courses: Algebra I, Biology I, English I, English II, and US History. A student is given multiple opportunities to retake sections of these tests if he/she not successful in passing them the first time.

I want to make sure I'm ready for college. How do I decide which classes to take?

The best advice... Challenge yourself to take the toughest classes in which you can be successful. You'll be better prepared for success in college and many colleges consider the difficulty of an applicant's courses in making admission decisions.

But, how do I decide which courses will be most challenging for me?

In this book, you'll notice that a number of courses are required - for instance, certain courses in math, science, language arts, and social studies - and that each class has several options or levels, with some offering an advanced format or a more in-depth approach for students who excel in that area of study. For some courses, especially advanced, you may be able to take Dual Credit (DC) or Advanced Placement (AP) classes. Students who take these college-level courses and do well may earn college credit or skip required entry-level classes in college. Talk to your parents, your teachers, and your counselor about which option best suits your academic strengths and prepares you for the courses you'll take in college.

Will I have to choose endorsements as I start 9th grade?

Yes and no. Become familiar with the graduation requirements and endorsements. A student should develop a personal graduation plan in the 8th grade. A student has until the end of their freshman year to make a final decision on one or more endorsements. Students and their parents should review the endorsements section of the counseling website or this course guide to see which endorsement is best suited to the student.

Are PE and Health required courses?

Yes, a year of PE and a semester of Health are required for graduation.

How important is it to be involved in extracurricular activities, such as clubs, sports, and volunteer projects?

Counselors recommend that all students participate in one or more extracurricular activity while in high school. Students who are involved in activities feel more connected to the school. Also, colleges and scholarship committees frequently request information on extracurricular participation and demonstrated leadership while in high school.

What is the difference between the SAT and the ACT college-entrance exams?

SAT - Greater emphasis on vocabulary and abstract thinking. Math content covers Geometry, Algebra I, and Algebra II. No Science questions. Reading Comprehension focuses on interpretation and on abstract, analogous thinking. The essay is required by some colleges and universities. Grammar section results included in writing score. The testing time is longer. (www.collegeboard.com)

ACT - Greater emphasis on academic content and comprehension. Math content covers Geometry, Algebra I, and Trigonometry. Reading Comprehension focus is straightforward and content-based, and includes grammar questions. The Science section includes graphs and table analysis, and correlations and analysis. The essay is optional. Greater emphasis on timed sections. The testing time is shorter. (www.act.org)

WORDS YOU NEED TO KNOW

ACT: A college-admissions test covering English, Reading, Science Reasoning, and Mathematics.

AP (Advanced Placement): Rigorous, college-level coursework taken in high school. Students who make a 3 or better (1–5 scale) on an AP exam at the end of the school year may earn college credit or skip entry-level college classes.

Application for Graduation/Senior Letter: A written report detailing a senior’s progress toward meeting graduation requirements, sent to the parent or guardian during the fall semester.

ASVAB (Armed Services Vocational Aptitude Battery): An assessment battery developed by the Department of Defense to measure an individual’s interests and aptitudes and used to assist with career decisions.

Career Pathway: A grouping of courses in technical education that provides knowledge and skills to use in postsecondary studies and in the workplace. Careful planning is required if a student wants to include technical classes in his or her high school schedule. See your counselor for more information.

Class Rank: A student’s standing based on his or her cumulative grade percent average as compared with that of other members of the class. In a class of 100, the student with the highest grade percent average would be ranked Number 1 and the lowest Number 100.

College Board: The organization that provides college-entrance testing, such as SAT Reasoning Test, SAT Subject Tests, TOEFL, PSAT, and AP exams.

College and Career Readiness: All the skills necessary for students, upon graduating from high school, being academically and socially equipped to be successful not only at the post-secondary educational level but also to be successful at an entry level position in the workforce.

Core Courses: Refers to both required and elective courses in Language Arts, Mathematics, Science, and Social Studies. (For college-admissions standards, Languages Other than English (Spanish, French) credits are included in Core Courses)

Credit Recovery: An opportunity for students to make up coursework previously failed in order to receive credit. This opportunity is provided before or after the end of the school day, during the day, if student’s schedule is flexible, or during summer school.

Credits: The term “credits” is used to identify how much each course passed counts toward meeting the 26 credits required for graduation from high school.

CTE (Career and Technical Education): Courses that focus on knowledge and skills that prepare students for postsecondary studies and for work in business and technical fields. Many of these courses will be used to fulfill endorsement areas for graduation.

CSS Profile: A financial aid form required by many private colleges, in addition to FAFSA.

GPA (Cumulative Grade Percent Average): The average of all of a student’s course GPAs in every high school course he or she has taken. For example, a student with A’s and B’s might have a cumulative GPA of 94%.

CGPA (Cumulative Grade Point Average): The average of all of a student’s course GPAs in every high school course the student has taken, using 4 for an A, 3 for a B, etc.

Dual Enrollment: This program allows students to pursue post-secondary study at approved public and private colleges and technical colleges while receiving both high school and college credit for courses successfully completed. Students pay a nominal fee for tuition.

EA (Early Action): Students applying to college by an early fall date (meeting higher entrance expectations) may receive a non-binding acceptance letter prior to winter break.

Early Decision: An agreement between college and applicant that indicates a student will attend the college if he or she is accepted early in the fall. Early decision programs are usually binding. Early Decision is not an obligation to be taken lightly, since schools honor one another’s binding decisions. Only students whose decision would not be contingent on receiving a certain level of financial aid should consider this option.

EOC (STAAR End of Course Tests): Tests that measure learning of the statewide curriculum in selected courses to ensure that high academic standards are being met in all Texas high schools, as required by the Texas Education Agency.

Endorsement: A high school “major” or area of focus. An endorsement is a focus on a specific career cluster, taking the subjects that students are most interested in and good at, giving them specialized knowledge and skills to prepare them for pursuit of a post-secondary education and/or career.

Elective Courses: Classes that may be selected by the student and are included in the 26 credits required for high school graduation.

Eligibility: Mandatory guidelines for student participation in sports and extracurricular activities. Check with your local school athletic director for details.

Fee Waiver: A form available to students with a low family income. The Fee Waiver Form is submitted instead of money when applying for college testing or admission. See your counselor for info on waivers.

Financial Aid: Money, which may be derived from a variety of sources (grant, loan, scholarships, work-study), that helps pay college costs. The “package” of funds is determined by family financial need and the availability of funds.

FAFSA (Free Application for Federal Student Aid): A form required by most colleges when applying for financial aid, including federal loans and other aid. Requests financial information from the current year tax return for the student and student's parents/guardians.

JROTC (Junior Reserve Officers' Training Corps): A four-year progressive program of leadership training and development, open to all students in grades 9-12.

NCAA Clearinghouse (Eligibility Center): Reviews high school transcripts and SAT/ACT test scores of students offered NCAA Division I and II scholarships to make sure all NCAA requirements are met.

Personal Graduation Plan: An outline of the courses a student plans to take while in high school. The plan will take into consideration the student's endorsement area, career goals, interests, and plans for additional education beyond high school.

Postsecondary: Referring to college or technical college/institute coursework.

Prerequisites: Courses, test scores, recommendations, and/or grade level that must be completed or acquired before taking the next sequential course, grade, etc.

Private College or University: A school that is not supported by state taxes; also referred to as an independent college.

PSAT/NMSQT (Preliminary SAT/National Merit Scholarship Qualifying Test): A shortened version of the SAT offered in October for high school students in grades 9, 10 and 11. To be considered for the National Merit Scholarship program, students must take the PSAT during the junior year.

Public College or University: A college or university that is supported by state funding and must follow state guidelines.

Required Courses: Specific courses that must be successfully completed prior to high school graduation. These courses must be retaken if not passed the first time.

SAT Reasoning Test: A college-admissions exam measuring critical reading and math in addition to proficiency in writing.

Semester: An 18-week instructional period during which students earn .5 credits for each course passed. The school year is comprised of two semesters.

TEKS (Texas Essential Knowledge and Skills): State standards for what students should know and be able to do in each subject/course and/or grade level.

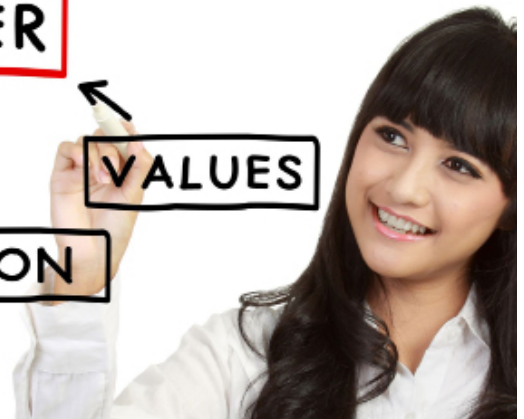
Transcript: The complete record of all high school courses taken and grades earned. A student's transcript contains his or her cumulative record.

TSIA (Texas Success Initiative Assessment): A program designed to help your institution determine if you are ready for college-level course work in the general areas of reading, writing and mathematics.

Tuition: A fee that is paid for instruction in a school, college, or university.

Weighted Credit: Credit received from taking an advanced course on a 5.0 GPA grading scale.

Zero Period: A course offered before the regular school bell rings to begin BHS instruction.



House Bill 5 & High School Graduation Requirements

Since the 2014-2015 school year, a school district must ensure that each student, on entering ninth grade, indicates in writing an endorsement that the student intends to earn. A district must permit a student to choose, at any time, to earn an endorsement other than the endorsement the student previously indicated.

A student may graduate under the foundation high school program 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 and the student's parent or person standing in parental relation files with a school counselor written permission, on a form adopted by the agency, allowing the student to graduate under the foundation high school program without earning an endorsement

A student may earn an endorsement by successfully completing:

- curriculum requirements for the endorsement
- four credits in mathematics
- four credits in science
- two additional elective credits

Foundation Advanced Courses

3rd Mathematics Credit

Financial Mathematics
PreCalculus
Statistics
Algebraic Reasoning
Computer Science AP

Algebra II
AP Statistics
AP Calculus
Math Models with Application

4th English Language Arts Credit

English IV
Creative Writing
AP English Literature & Composition
Business English

2nd Science Credit

Integrated Physics and Chemistry
Physics
AP Physics I: Algebra-based

Chemistry
AP Chemistry

3rd Science Credit

Chemistry
AP Biology
AP Chemistry
AP Physics C
Physics
Forensic Science
AP Physics I: Algebra-based
AP Physics II: Algebra-based
Advanced Animal Science
Pathophysiology
Scientific. Research & Design
Food Science

Endorsement Advanced Courses

4th Math Credit to Earn an Endorsement

Precalculus
Algebra II
Statistics
Computer Science AP
AP Statistics
AP Calculus
Algebraic Reasoning
Robotics II

4th Science Credit to Earn an Endorsement

Chemistry
AP Biology
AP Chemistry
AP Physics C
Physics
Forensic Science
Food Science
AP Physics I: Algebra-based
AP Physics II: Algebra-based
Advanced Animal Science
Anatomy & Physiology
Scientific Research & Design
Pathophysiology
Advanced Plant and Soil
Scientific Research and Design

BHS GRADUATION REQUIREMENTS

| Subject | Foundation HSP | Foundation + Endorsement | Distinguished Level of Achievement |
|--|---|--|--|
| English | 4 Credits - English I, II, III, and 1 advanced English course | 4 Credits - English I, II, III, and 1 advanced English course | 4 Credits - English I, II, III, and 1 advanced English course |
| Mathematics | 3 Credits - Algebra I, Geometry, 1 advanced math course | 4 Credits - Algebra I, Geometry, 2 advanced math courses | 4 Credits - Algebra I, Geometry, Algebra II, 1 advanced math course |
| Science | 3 Credits - Biology, 1 advanced science course, 1 credit in IPC or any advanced science course | 4 Credits - Biology, 2 advanced science courses, 1 credit in IPC or any advanced science course | 4 Credits - Biology, 2 advanced science courses, 1 credit in IPC or any advanced science course |
| Social Studies | 3 Credits - US History, Govt, Economics, World Geo, or World History | 3 Credits - US History, Govt, Economics, World Geo, or World History | 3 Credits - US History, Govt, Economics, World Geo, or World History |
| Physical Education | 1 Credit | 1 Credit | 1 Credit |
| Languages Other Than English | 2 Credits - in the same language, including Computer Programming | 2 Credits - in the same language, including Computer Programming | 2 Credits - in the same language, including Computer Programming |
| Fine Arts | 1 Credit | 1 Credit | 1 Credit |
| Endorsements | ----- | 4 Credits | 4 Credits |
| Health | 1/2 Credit | 1/2 Credit | 1/2 Credit |
| Technology Applications | 1 Credit | 1 Credit | 1 Credit |
| Electives | 3.5 Credits | 1.5 Credits | 1.5 Credits |
| EOC Testing | pass English I, English II, Algebra I, Biology, and U.S. History EOC Tests | | |
| Total Credits | 22 Credits | 26 Credits | 26 Credits |
| <i>Health and Technology Applications credits are Brenham High School graduation requirements (not state requirements)</i> | | | |
| Distinguished Level of Achievement = Foundation + Endorsement + Algebra II | | | |
| <i>A student must earn Distinguished Achievement to be considered in the "Top 10%" of the class and qualify for automatic college admission.</i> | | | |

BHS ENDORSEMENTS & REQUIREMENTS

ENDORSEMENT

REQUIREMENTS

| | |
|---|---|
| <p>STEM <i>Science, Technology, Engineering, & Mathematics</i></p> | <p>A coherent sequence or series of courses selected from one of the following:</p> <ul style="list-style-type: none"> ● Four or more CTE courses in a coherent sequence that consists of at least two courses in the STEM career cluster including at least one advanced CTE course ● A total of five credits in mathematics by successfully completing Algebra I, Geometry, Algebra II and two additional mathematics courses for which Algebra II is a prerequisite ● A total of five credits in science by successfully completing biology, chemistry, physics, and two additional science courses ● In addition to Algebra II, chemistry, and physics, a coherent sequence of three additional credits from no more than two of the areas listed above |
| <p>Business and Industry</p> | <p>A coherent sequence or series of courses selected from ONE of the following:</p> <ul style="list-style-type: none"> ● Four or more CTE courses in a coherent sequence that consists of at least two courses in the same career cluster including at least one advanced CTE course in: <ul style="list-style-type: none"> <li style="width: 33%;">❖ Agriculture, Food, & Natural Resources <li style="width: 33%;">❖ Architecture & Construction <li style="width: 33%;">❖ Finance <li style="width: 33%;">❖ Business Management & Administration <li style="width: 33%;">❖ Distribution & Logistics <li style="width: 33%;">❖ Marketing <li style="width: 33%;">❖ Hospitality & Tourism <li style="width: 33%;">❖ Information Technology <li style="width: 33%;">❖ Manufacturing <li style="width: 33%;">❖ Transportation <li style="width: 33%;">❖ Arts, Audio/Video, Technology & Communications ● The following English electives: public speaking, debate, advanced broadcast journalism including newspaper and yearbook ● Technology Applications ● A combination of credits from the categories listed above |
| <p>Public Services</p> | <p>A coherent sequence or series of courses selected from ONE of the following:</p> <ul style="list-style-type: none"> ● Four or more CTE courses in a coherent sequence that consists of at least two courses in the same career cluster including at least one advanced CTE course in: <ul style="list-style-type: none"> <li style="width: 50%;">❖ Education & Training <li style="width: 50%;">❖ Human Services <li style="width: 50%;">❖ Law, Public Safety, Corrections, and Security <li style="width: 50%;">❖ Health Science ● Four courses in JROTC |
| <p>Arts and Humanities</p> | <p>A coherent sequence or series of courses selected from ONE of the following:</p> <ul style="list-style-type: none"> ● A total of 5 Social Studies credits ● Four levels of the same language in Languages Other Than English (i.e. Spanish) ● Two course levels in each of two different languages (i.e. 2 in Spanish & 2 in French) ● Courses from one or two categories (art, dance, music, and theater) in fine arts ● English electives that are not part of Business and Industry (i.e. Debate) |
| <p>Multidisciplinary</p> | <p>A coherent sequence or series of courses selected from ONE of the following:</p> <ul style="list-style-type: none"> ● Four advanced courses that prepare a student to enter the workforce successfully or post-secondary education without remediation from within one endorsement area or among endorsement areas that are not in a coherent sequence ● Four credits in each of the four foundation subject areas to include English IV and chemistry and/or physics ● Four credits in AP, IB, or dual credit selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts |
| <p>Total Credits with Endorsement = 26 Credits</p> | |
| <p>Distiguated Level of Achievement</p> | <ul style="list-style-type: none"> ● A total of four credits in math, including credit in Algebra II ● A total of four credits in science ● Completion of curriculum requirements for at least one endorsement |
| <p>Performance Acknowledgments</p> | <ul style="list-style-type: none"> ● For outstanding performance <ul style="list-style-type: none"> ❖ In a dual credit course ❖ In bilingualism and biliteracy ❖ On an AP test or IB exam ❖ On the PSAT, the ACT-Plan, the SAT, or the ACT ❖ Earn a nationally/internationally recognized business or industry certification or license |

Endorsements with Career Pathways

| Business & Industry | | | B&I: Business Marketing, & Finance-Accounting & Financial Services | | | Multi-Disciplinary Studies |
|--|-----------------------------|-------|--|-----------------------------------|-------|---|
| B&I-Agriculture, Food, & Natural Resources: Animal Science | | | 5213 | Money Matters | 9 | Option #1 - 4 credits in each of the four foundation subject areas to include English 4, Chemistry and/or Physics |
| 5110 | Prin. of AFNR | 9-12 | 5220 | Accounting I | 10-12 | Option #2 - 4 AP subjects to include one credit in each of the four foundation subjects |
| 5125 | Small Animal Mgmt.(Fall) | 10-12 | 5236 | Financial Mathematics | 11-12 | Option #3 - 4 advanced courses from within one endorsement area that are not in a coherent sequence |
| 5126 | Equine Science (Spring) | 10-12 | 5260 | Accounting II | 11-12 | |
| 5124 | Livestock Production | 10-12 | 5133 | Career Prep | 11-12 | |
| 5132 | Vet Med Applications | 11-12 | B&I: Arts, AV Tech & Communications: Design & Multimedia Arts | | | Arts & Humanities |
| 5141 | Adv. Animal Science | 11-12 | 5630 | Graphic Design | 9-12 | |
| 5541 | Scientific Research/Design | 11-12 | 5620 | Fashion Design | 10-12 | 5 Social Studies Courses |
| 5135 | Practicum in AFNR | 11-12 | 5650 | Commercial Photography I | 10-12 | Four courses in each below |
| B&I: Agriculture, Food, Natural Resources: Environmental Sciences | | | 5627 | Digital Media | 10-12 | Theater Arts I-IV |
| 5110 | Prin. of AFNR | 9-12 | 5628 | Digital Design & Media Production | 11-12 | |
| 5129 | Wildlife, Fish, Eco Mgmt. | 10-12 | 5631 | Graphic Design II | 11-12 | Technical Theater I-IV |
| 5144 | Range & Ecology Mgmt. | 11-12 | 5651 | Comm. Photo. II | 11-12 | |
| 5541 | Scientific Research & Des. | 11-12 | 5631 | Fashion Design II | 11-12 | Art I-IV |
| 5135 | Practicum in AFNR | 11-12 | 5652 | Practicum in Comm. Photography | 11-12 | |
| B&I: Agriculture, Food, Natural Resources: Plant Sciences | | | B&I: Manufacturing– Adv. Mfg. and Machine Mechanics | | | Chorus I-IV |
| 5110 | Prin. of AFNR | 9-12 | 5531 | Robotics I | 9-12 | |
| 5130 | Floral Design | 10-12 | 5532 | Robotics II | 10-12 | Dance I-IV |
| 5131 | Advanced Floral Design | 11-12 | 5025 | Practicum in Mfg. | 11-12 | |
| 5142 | Adv. Plant & Soil Science | 11-12 | 5133 | Career Prep I | 11-12 | Spanish I-IV |
| 5128 | Landscape Design & Mgmt. | 10-12 | 5531 | | | |
| 6208 | Turf Grass Management | 10-12 | B&I: Business Marketing, & Finance: Business Management | | | French I-IV |
| 5541 | Scientific Research & Des. | 11-12 | J894 | Human Resources Mgmt. | 8 | or |
| 5135 | Practicum in AFNR | 12 | 5636 | Global Business | 10-12 | 2 Spanish, 2 French |
| B&I: Agriculture, Food, & Natural Resources Applied Agricultural Engineering | | | 5637 | Virtual Business | 10-12 | Spanish I & II, French I & II |
| 5110 | Prin. of AFNR | 9-12 | 5237 | Practicum in Bus Mgmt. | 11-12 | |
| 5134 | Ag Mech. & Metal Tech | 9-12 | B&I: Info Tech. Networking Systems | | | |
| 5018 | Ag Structures Design & Fab. | 10-12 | 5215 | Principles of Information Tech | 9-12 | |
| 5021 | Ag Power Systems | 11-12 | 5203 | AP Computer Science Prin. | 10-12 | STEM |
| 5025 | Ag Equip. Design & Fab. | 11-12 | 5133 | Career Prep 1 | 11-12 | |
| B&I: Architecture & Construction Construction Management & Ins | | | | | | STEM- Science or Math |
| 5710 | Principles of Construction | 9-12 | | | | 5 courses in math |
| 5721 | Construction Mgmt. I | 10-12 | | | | 5 courses in science, cannot include IPC |
| 5731 | Construction Mgmt. II | 11-12 | | | | |
| 5741 | Practicum in Construction | 11-12 | | | | |

| | | | PS Law & Public Service | | | Notes |
|--|---------------------------------------|-------|--|---|-------|-------|
| STEM- Cybersecurity | | | 5832 | Principles of Law & Security | 9-12 | |
| 5199 | Foundation of Cybersecurity | 9-12 | 5830 | Law Enforcement I | 10-12 | |
| 5125 | Principles of info Tech | 9-12 | 5831 | Law Enforcement II | 11-12 | |
| 5203 | AP Computer Science Principles | 10-12 | 5614 | Forensic Science | 11-12 | |
| 5210 | Digital Forensics | 11-12 | 5427 | Counseling & Mental Health | 10-12 | |
| 5306 | AP Computer Science A | 11-12 | 5833 | Practicum in Law Enforcement | 11-12 | |
| 5229 | Practicum in Info Tech | 11-12 | | | | |
| | | | PS Health Science Healthcare Therapeutics | | | |
| STEM-Program & Software Development | | | 5321 | Medical Terminology | 9-12 | |
| 5200 | Foundation of Computer Science (Fall) | 9-12 | 5320 | Health Science Theory | 10-12 | |
| 5201 | Computer Science I (Spring) | 10-12 | 5332 | Anatomy & Physiology | 11-12 | |
| | Computer Science II | 11-12 | 5331 | Pathophysiology | 11-12 | |
| 5209 | Gaming Programming & Design | 11-12 | 5330 | Practicum in Health Science-Certified Medical Assistant (CMA) | | |
| | | | PS Health Science – Exercise Science & Wellness | | | |
| Public Service (PS) | | | 6255 | Principles of Exercise Sciences & Wellness | 9-12 | |
| PS Human Services/Family & Community Services | | | 6256 | Kinesiology I | 10-12 | |
| 5412 | Principles of Human Services | 9-12 | 5332 | Anatomy & Physiology | 11-12 | |
| 5421 | Dollars & Sense | 9-12 | TBD | Kinesiology II | 11-12 | |
| 5403 | Project Based Research (PALS I) | 11-12 | | | | |
| 5414 | Practicum in Human Services (PALS II) | 12 | | | | |
| | | | | | | |
| PS Education & Training | | | | | | |
| | Principles of Education | 9 | | | | |
| 5422 | Child Development | 9-12 | | | | |
| 5434 | Instructional Practices (CARS I) | 11-12 | | | | |
| 5433 | Practicum in Education (CARS II) | 12 | | | | |
| | | | | | | |
| PS JROTC (Marine Corps) | | | | | | |
| 6010 | ROTC Leadership I | 9-12 | | | | |
| 6020 | ROTC Leadership II | 10-12 | | | | |
| 6030 | ROTC Leadership III | 11-12 | | | | |
| 6040 | ROTC Leadership IV | 12 | | | | |
| 6011-6041 | CORE ROTC Competition Teams | 9-12 | | | | |

STATE AND SCHOOL INFORMATION

Registering & Planning for High School

Some students are sure of their future plans; others are not. It is also common for young people to change their minds about which career cluster to choose. For this reason, it is important for you to plan as challenging a program as you can. If your career plans should change, then it will not be as difficult to move into another program. While it may sometimes seem tempting to schedule a less demanding combination of courses, choosing courses that meet your needs or interests is the best way to prepare for your future.

Credits

The school year at Brenham High School consists of two semesters of 18 weeks each. One-half credit is awarded for successful completion of a class that meets for one period each semester. For example, a student who passes health during the first (fall) semester of the school year receives one-half credit toward graduation. A student could have the ability to earn 3.5 credits each semester or 7 credits for both semesters.

Many Brenham High School students have the opportunity to earn 28+ credits during the four years of high school. Students are required to have 26 credits in specific courses in order to meet graduation requirements for Brenham ISD.

State credit will be awarded upon completion of a high school course, whether the course is taken in Junior High school, summer school, or during regular term. The student must demonstrate mastery of each course with a passing grade of 70 on a scale of 0 - 100. Local credits will be awarded for courses approved by the Brenham ISD Board of Trustees but not state-approved. Local credit courses cannot be counted toward state graduation requirements, unless on the minimum plan, then only 2 local credits may be part of the required 26 credits. The credits earned in each class are shown in the course description.

Students may lose credit for a course in which they earn a passing grade if they are not in attendance at least 90% of the class days. Information about attendance requirements is found later in this section.



Scheduling Process

Scheduling students for the next academic year is one of the most important activities in the student's academic life. The Brenham High Staff encourages parents and students to make wise and appropriate decisions that allow our graduates to be prepared to pursue additional educational opportunities leading to their desired careers.

Due to the wide variety of courses offered at Brenham High School, students should **read the course description book carefully** and talk with their counselor and teachers throughout the scheduling process. Many courses have specific prerequisites, and some courses require an approval form with the teacher/coach/coordinator before enrollment is granted.

Courses offered during the next school year are always determined by the student selections made during the pre-enrollment process in early spring. Students complete a course selection form using the courses and sections for the following school year. Courses lacking sufficient enrollment of 15 or more students may not be offered. The number of sections for each course will also be determined by the number of students requesting the course. Once student course selection requests for classes have been established for the next year's master schedule, **students are expected to follow their original choices throughout the next school year.**

Course Cancellation

BISD reserves the right to cancel any course if pre-registration indicates insufficient enrollment to "make" the course or if a certified staff member is not available to teach the course.

Schedule Changes

NO SCHEDULE CHANGES WILL BE MADE AFTER THE START OF SCHOOL. When a student requests a schedule change after the start of school, the change will be viewed as a situation demanding serious consideration by the counselor. There are no teacher requests and no schedules will be changed based on teacher request.

If there are concerns in a class, a student should have a conference with the teacher to discuss the concerns. If necessary, this can be followed up by a student/parent conference.

Advanced Course Schedule Changes

During the first six weeks of the semester, a student may exit an advanced course in which he/she is enrolled and move to another course of the same type (e.g., exit Advanced World History and enroll in World History), provided there is space available in the desired course along with teacher conference, parent permission, and counselor approval. After the first six week period, a student may only exit an advanced course at the end of the semester, following normal procedures. This includes all Blinn Dual Credit course. Students may not enter an advanced course at midterm.

Grade Classification

Grade classification for all students are determined annually, during the summer. Grade classification shall be determined by credits earned:

- ❖ **Freshman** (9th grade): 0 - 4.5 credits
- ❖ **Sophomore** (10th grade): 5 - 11.5 credits
- ❖ **Junior** (11th grade): 12 - 17.5 credits ; Juniors who may graduate in May of the current school year will be reclassified at the end of the fall semester. All other students are reclassified only during the summer before the new school year.
- ❖ **Senior** (12th grade): 18 or more credits
- ❖ **Graduate**: 26 credits which meet an appropriate graduation program and completion of state testing requirements.

Calculating GPA

All courses from the following academic areas shall be used in calculating a student's GPA and rank in class: English/language arts, reading, mathematics, science, social studies, economics/free enterprise, health, languages other than English, theater arts, art, ROTC, and career and technical education.

Honor Graduates

All students who have completed the Recommended or Distinguished Achievement Program or Foundation Program with an Endorsement for graduation, and has an overall GPA of 3.25 or higher, shall be recognized as honor graduates.

STAAR EOC Testing Requirements

The STAAR program emphasizes "readiness" standards, which are the knowledge and skills that are considered most important for success in the grade or subject that follows and for college and career.

To graduate from BHS you will need to complete all of the necessary coursework information and each of the **five EOC exams: English I, English II, Algebra I, Biology I, & U.S. History.**

If a student is enrolled in grade 8 or below and is taking a course for which there is a STAAR EOC assessment, that student will be required to take the applicable STAAR EOC test. For example, an eighth grade student enrolled in Algebra I will take the STAAR Algebra I EOC, as well as the grade 8 reading, science, and social studies assessments.

What happens if you pass the course but fail the test?

If a student passes the course, but does not earn the required minimum score on the EOC assessment, the student must retake the test. The student is not required to retake a course as a condition of retaking the test for that course. The school is required to provide accelerated instruction to each student who fails to perform satisfactorily on any EOC assessment.

Please note that EOC testing requirements are independent of course credit, attendance, and any other requirements necessary for graduation, as outlined by Texas state law (19Texas Administrative Code § 74). Also, in accordance with local school board policy (FMH-Local), students must meet these require-

ments in order to participate in commencement activities.

More information about STAAR can be found at www.tea.state.tx.us/student.assessment/staar/

Credit Denial

Students must be in attendance at least 90% of the time a class is in session to receive credit. (Texas Education Code 25.092) Excused and unexcused absences more than five, will cause a student to lose credit. A student who attends fewer than 90% of the days the class is offered cannot receive credit for the class unless the attendance committee finds that the absences are the result of extenuating circumstances.

Courses On A 5.0 Grade Scale

Brenham High School offers weighted grade point classes for all dual credit, pre-advanced and advanced courses. Students receive one extra grade point per each semester they successfully complete. Grade point averages are computed by the total number of points amassed by the student; the greater the number of grade points, the higher the G.P.A.

Physical Education Requirements

There are several ways to meet the physical education graduation requirements other than taking regular physical education classes. The following statements should be considered as you develop your PGP if you want to substitute for physical education.

- A student may not enroll in more than one physical education or athletics class per semester. Exceptions are with P.E. substitutes, JROTC, Cheerleading, Drill Team, and Marching Band
- All athlete must be enrolled in his/her sport every day.
- A student dropped from an athletic program at the beginning of the semester will be enrolled in a regular physical education class for the remainder of the semester. If the student athlete has fulfilled his/her physical education requirements, a substitute class may be considered.
- Based on the physical activities involved in marching band, cheerleading, belles, ROTC, and athletics, students may substitute these activities for the required credits in physical education.

Students who are permanently impaired with the respect to participation in physical education activities are required to present written documentation from a physician as to the nature of the impairment and the expectations for physical activity. These students will be offered a waiver from physical education graduation requirements. Students who are temporarily impaired with respect to participation in physical education activities are required to present written documentation from a physician as to the nature of the impairment and the expectation for physical activity. These students will be offered alternative methods to meet their physical education requirements.

Blinn College Dual Credit

Brenham High School has teamed up with Blinn College to offer dual credit classes for BHS students. These courses will fulfill high school graduation requirements and also provide college credit. The student must have a GPA of 2.75 or higher, MUST attend an orientation meeting, take the TSIA, and pay for course tuition, books, and fees. Classes offered along with all pre-requisites are found in the course listings.

Advanced Placement Credit

Students also have the opportunity to receive college credit through Advanced Placement (AP) courses. AP is rigorous, college-level coursework taken in high school. Students who make a 3 or better (1-5 scale) on an AP exam at the end of the school year may earn college credit from numerous Texas colleges or skip entry-level college classes. Classes offered along with all pre-requisites are found in the course listings.

Working Off Campus

Students may be employed during school hours only if enrolled in a CTE career preparation program. Because employment is a required component of the career preparation programs, these programs are only open to juniors and seniors. The CTE career preparation programs are on-the-job training programs, and designed to provide occupationally specific training. The training is planned and supervised cooperatively by the school and employers. A student may enter CTE career prep. only at the beginning of the school year. To receive 1 1/2 credits each semester, you are required to work a minimum of 15 hours per week. You should be off campus during the scheduled training periods. Any student not employed by the end of the first week of classes will be scheduled into seven classes.

Texas Public University Automatic Admission Policy

Students graduating in the top 7-10% of our school's graduating class are granted automatic admission into most public four-year universities or colleges for two years following graduation. To qualify for this automatic admission, students must complete one of the following two criteria (TEC 51.803):

- Complete either the Recommended or Distinguished Achievement programs
- Satisfy the SAT or ACT score requirements for designated colleges/universities

NCAA

Student-athletes who have aspirations of playing sports at the collegiate level need to visit the NCAA eligibility website at www.eligibilitycenter.org for information about the qualification process of playing at the collegiate level. The website contains steps to take in the eligibility process, qualifying coursework offered at Brenham HS, and the standards that must be met to participate in NCAA sports. Please contact the school's NCAA Coordinator, Philip Roberts, with any questions.

Nontraditional Methods of Earning Credits

Junior High Courses

Students may also earn high school credit when they complete high school courses during their junior high school years.

Summer School Credits

Summer school and credit recovery courses are offered as an option for students needing to regain course credit. They will be offered through an online format. Courses completed through credit recovery or summer school will have a capped grade of 75 and are not used in calculating high school grade point averages or rankings. Prior to registration, counselor approval is needed to ensure that the correct courses are selected.

Credit by Exam (without prior instruction)

Students who wish to receive credit without formal instruction in a course may do so through credit by examination. A student must score 80 or above on an approved test selected and administered by the district. These tests are announced in the fall and spring, and students must register for the tests at least 30 days prior to the test administration dates. Grades received on these exams will not be used in calculating grade point averages or class rankings.

Correspondence Courses

A maximum of 2 credits may be earned by correspondence courses. Prior to enrollment, students must make a written request to the counseling office for approval to enroll in the course. Correspondence courses may be used for enrichment or in case of emergency; they are not a substitute for the regular school program. All correspondence work must be completed with the final grade reported from the university to the counselor's office in order to participate in graduation exercises. Grades from correspondence courses will not be used in calculating grade point averages or class rankings.

Distance Learning Courses

The Texas Virtual School Network (TxVSN) offers distance learning courses that encompass the state required TEKS for graduation. A student has the option to enroll in a course to earn credit for graduation. The student must receive permission from BHS prior to enrolling in the course or subject.

Career Assessments and College Prep Course Work

BISD Career Planning is a method of assessment you will take for career choices. The results from the assessments will provide you with a tool to better understand your strengths and abilities to broad career clusters.

All eighth grade students will be tested each year. The instrument used is designed to help eighth-graders explore a broad range of career and academic options to choose elective classes and to complete a 6-year plan for the career clusters of their choice.

POSTSECONDARY PLANNING CHECKLISTS

The following timeline lists only a few things to do at each grade level as you prepare for college.
For more complete information, consult your guidance counselor.

THROUGHOUT EACH YEAR

- Be sure to take the appropriate courses
- Maintain good grades
- Gather and review information about colleges
- Visit the Career Center at your high school
- Investigate costs of various college programs
- Continue to review all career choices and options
- Participate in community service activities
- Start developing a resume

8TH GRADE

- Take Choices360 Career Assessment
- Develop your graduation plan
- Pre-register for credit courses
- Develop good study habits
- Participate in a variety of extracurricular activities
- Participate in community service activities
- Attend Academic Fair

9TH GRADE - FRESHMAN YEAR

- Review your high school program of studies with your school counselor and parents
- Check course selections and determine if you are in the correct courses
- Begin researching your career choices and the educational requirements of each possible career pathway
- Develop good study habits
- Participate in a variety of extracurricular activities
- Participate in community service activities

10TH GRADE - SOPHOMORE YEAR

AUGUST

- Check credits to make sure you are on schedule to graduate
- Check with your guidance counselor to make sure your courses meet college entrance requirements

SEPTEMBER

- Register to take the PSAT. Consider participating in a PSAT preparation program.

OCTOBER

- Take PSAT. Study the PSAT/NMSQT bulletin and other aids available. The PSAT is only offered in October.

DECEMBER/JANUARY

- Study your PSAT score report. Be sure to compare items missed with the correct responses.

SPRING

- Take the TSI test, if you are plan to take classes at Blinn College while at BHS (unless PSAT, SAT, or ACT exemptions)

11TH GRADE - JUNIOR YEAR

AUGUST

- Check credits & make sure you're on schedule to graduate
- Check with your guidance counselor to make sure your courses meet postsecondary goals/requirements

SEPTEMBER

- Register and prepare to take the PSAT

OCTOBER

- Take the PSAT for National Merit Scholar recognition
- Attend College Night

DECEMBER

- Review college information entrance requirements
- Review financial aid and scholarship information available in the Career Center

JANUARY/FEBRUARY

- Take the SAT/ACT test prep course
- Register for the SAT, ACT, and achievement tests
- Write for application packets for ROTC scholarship or admission to a service academy, if you plan to apply
- Student athletes should check NCAA requirements

FEBRUARY/MARCH

- Plan a study program for your senior year with counselor
- Learn about opportunities to earn college credit or advanced placement
- Take as many academic courses as possible
- Participate in community service activities
- Plan college visits and arrange for interviews (visit college campuses while classes are in session)
- Attend Career Fair

MAY/JUNE

- Take SAT/ACT/ Take SAT II Achievement test(s)
- Explore your postsecondary options & admissions process

SUMMER (Before Senior Year)

- Student-athletes register with the NCAA Clearinghouse
- Select the top 5-10 colleges you feel best meet your needs
- Trim your list to 5-6 colleges. Include a "sure best", two or three "good prospects," and a "dream school"
- Contact top college choices for apps and scholarships
- Plan college visits and arrange for interviews (visit college campuses while classes are in session)
- Request catalogs, applications, financial aid information, and specific information about your proposed major
- Take the TSI test unless PSAT, SAT, or ACT exempted
- Student athletes should check NCAA requirements

POSTSECONDARY CHECKLIST FOR 12TH GRADE - SENIOR YEAR

AUGUST

- Research scholarships and loan possibilities
- Check your credits. Ensure credits & courses to graduate
- Make schedule adjustments to meet requirements of particular course of study of college you wish to attend
- Letters of Recommendation (from your counselor: fill out Senior Data Sheet & allow 2 weeks)
- Begin application process for Texas public universities at applytexas.org

SEPTEMBER

- Meet with your counselor to review your records
- Match records to entrance requirements of desired colleges/postsecondary options
- Submit to the counselor your Senior Data Sheet.
- Ask well known adults to write letters of recommendation
- Prepare a resume to assist letter of recommendation writers
- Update all information throughout the year
- Choose a minimum of 3 colleges to which you will apply
- Include at least one college you feel will definitely accept
- Send for application materials and financial aid information
- Check college catalogs for deadline dates for application for admissions, housing, financial aid, required entrance exam(s), and acceptable financial aid form (FFS or FAFSA)
- Register for the TSIA test unless you are exempt
- Early decision candidates, file application before deadline. Also, check LAST acceptable test date for an early decision
- Register to take the appropriate test (SAT or ACT)
- Consider participating in the SAT prep course
- Schedule college tours. Check your school calendar for dates when you are not in school other than holidays. Call or write ahead for an appointment. Meet with college reps when they visit your high school.

OCTOBER

- Distribute application and recommendation forms to guidance counselors and teachers for completion of their sections (please allow at least 2 weeks for completion)
- Arrange sending of college transcript & recommendations
- Begin filling out application forms. Many colleges require essay responses. Allow ample time for quality. Ask a teacher to proof your essay
- Meet early decision deadlines for housing, scholarships, or financial aid. Check with the school for their deadlines
- Take/retake the SAT or ACT if necessary. Find out the SAT II requirements of your college choices.
- Proof your timeline for step completion in the college admissions process. Application(s) should be mailed before Nov. Request SAT or ACT scores be sent to all colleges to which you have applied.

NOVEMBER

- Complete college applications for admissions

- Follow up on letters of recommendation. Request transcripts as needed. Copy ALL forms before you mail them.

DECEMBER

- Notification of early decision acceptance by Dec. 15. If you are not accepted, fill-out other applications IMMEDIATELY
- Ask parents to begin gathering their financial information
- Take SAT subject test if required by colleges of your choice

JANUARY

- Complete financial aid forms (FAFSA and/or FFS) online as soon after Jan. 31 as possible. Mail any supplemental financial forms required by the colleges of your choice.
- Continue researching scholarships and loans
- Check with your counselor to make sure that any mid-year reports are completed and returned to colleges

FEBRUARY/MARCH

- Keep your grades up & Finish Strong! REMEMBER you will be accepted to college/postsecondary institutions "pending the successful completion of your 12th grade course work"
- Sign-out and complete the local scholarship packet through the counseling office. Complete qualifying scholarships
- Attend Career Fair

APRIL

- Look for mailed acceptance notices
- Carefully choose your college, and notify the college letter of your acceptance. Notify other colleges to decline
- If you are wait-listed and wish to be kept in consideration, be sure to advise the college
- If ALL colleges send rejections - DON'T PANIC! There are several alternatives. See your counselor immediately.
- Finalize plans for housing, financial aid, and/or scholarships
- Make any deposits required by the institution you plan to attend. Check college websites for their deadlines.
- If applicable, register to take Advanced Placement Test(s)

MAY

- Make final choice of college or university, and complete all details concerning college admissions
- Notify your counselor of your final postsecondary choice and whether you have been awarded scholarships (academic, athletic, artistic, dramatic, musical, & financial aid)
- Request a final transcript be sent to college of your choice
- Take Advanced Placement Test(s) as previously decided

SPRING BEFORE COLLEGE FRESHMAN YEAR

- Request AP test grades sent to the College Entrance Examination Board
- Participate in college orientation program. This may occur in spring or take place just prior to fall term
- Check on opportunities to pre-register for fall term classes and explore all campus resources

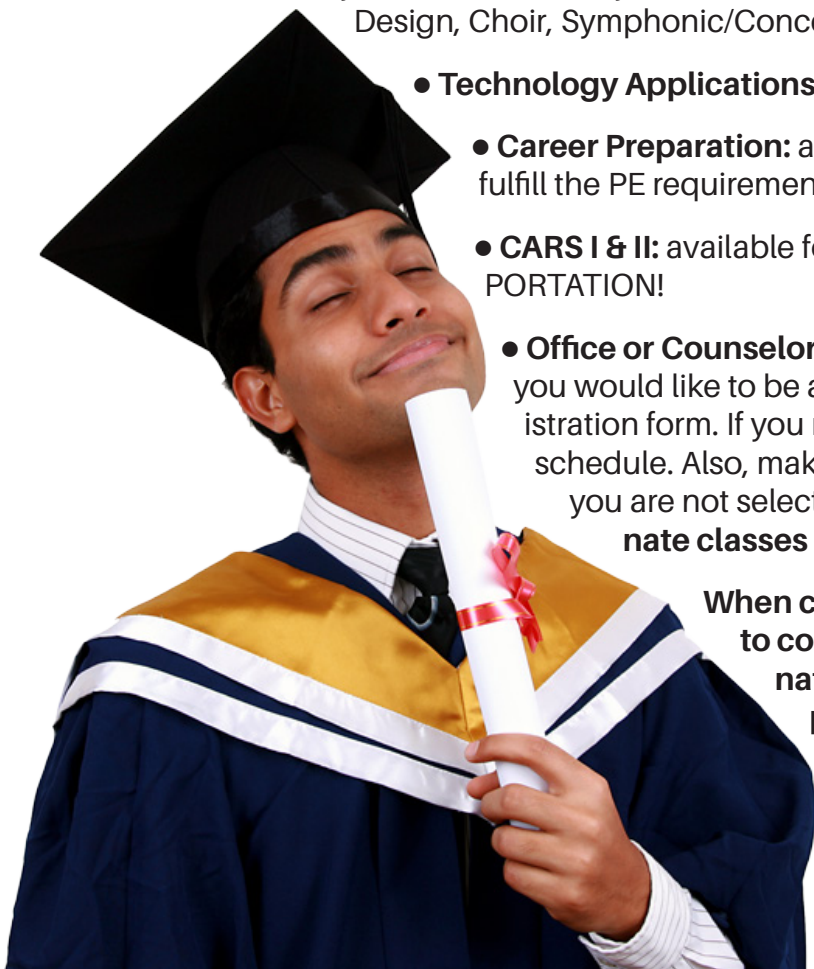
COURSE REGISTRATION INFORMATION

The courses you register for will be the courses you will be placed in unless the course is not offered for some reason or it becomes filled to capacity. Please make your course selections carefully and **include alternate choices**.

A schedule change to a different course will not be made once classes have begun for the school year. If you change your mind about a course after registration, you must notify your counselor in writing prior to the end of the current school year before student schedules are finalized during the summer.

- **Alternate Courses:** Students are not guaranteed to get their first choice electives. Alternate courses are needed as a back-up choice. If you do not put an alternate request, and you are scheduled into a class you did not request, you may not be allowed to change out of the elective you are put in.
- **Teacher/Coach's Signature:** Most Pre-AP, AP, and Athletic classes **MUST** have a teacher/coach's signature. Cheerleaders who take athletics, will do athletics first and cheerleading the last part of the period. Cheerleaders must do competition in the Spring.
- **Dual Credit:** Juniors and Seniors taking classes at Blinn College may get college credit, as well as high school credit with English IV, US History, Government, Economics, and Sociology. **An overall GPA of 2.75 is required in order to take Dual Credit classes.** Participants must pay for course tuition (\$150 per course), required books, & misc. fees.
- **Physical Education:** 1 credit may be fulfilled by Athletics (1 year), Marching Band (2 years), Drill Team (1 year), ROTC (1 year), Cheerleading (1 year)
- **Health Education:** 1/2 credit or one full year of Intro to Health Science Technology (local requirement)
- **Fine Arts:** 1 credit may be fulfilled with 1 year of Art, Theater Arts, Technical Theatre, Principles of Floral Design, Choir, Symphonic/Concert or Varsity Band
- **Technology Applications:** must have one credit (local requirement)
- **Career Preparation:** available to Juniors and Seniors only. (does not fulfill the PE requirement)
- **CARS I & II:** available for Juniors and Seniors and **MUST HAVE TRANSPORTATION!**
- **Office or Counselor Aide:** Do not pre-register for these positions. If you would like to be an Office or Counselor Aide, put it on your pre-registration form. If you meet the criteria and are selected, it will be on your schedule. Also, make sure you have alternate classes listed to take if you are not selected for an aide position. **If you do not have alternate classes listed, you will not be considered for an aide.**

When completing the Course Selection Form, be sure to completely fill out the entire form, including alternate courses, circle the Graduation Plan, and complete the required signature lines on the bottom of the form. MAKE SURE YOU GET TEACHER/COACH'S SIGNATURES.



COURSE SELECTION FORM

I.D. #: _____ Name: _____ Grade: _____

Address: _____ Male or Female

Parent/Guardian Name(s): _____

Home Phone: _____ Parent Work Phone: _____

Student Cell Phone: _____ Parent Cell Phone: _____

Student Email: _____ Parent Email: _____

Indicate Type of Graduation Plan: Foundation Foundation with Endorsement
 Distinguished Achievement

| SEMESTER 1 | | SEMESTER 2 | |
|--------------------------|---------------|------------------------|---------------|
| Course Name | Course Number | Course Name | Course Number |
| English | | English | |
| Math | | Math | |
| Science | | Science | |
| Social Studies | | Social Studies | |
| 1 st Elective | | 1 st Choice | |
| 2 nd Elective | | 2 nd Choice | |
| 3 rd Elective | | 3 rd Choice | |
| * ALTERNATES * | | * ALTERNATES * | |
| | | | |
| | | | |
| | | | |

If no alternates are listed and your first choice class is not offered, you will be placed in a class which you will not be able to change out of.

Remember, all math, science, athletics, and advanced courses MUST have a teacher's approval.

Student Signature Date

Parent Signature Date

----- MAKE A COPY OF YOUR COMPLETED COURSE SELECTION FORM FOR YOUR RECORDS -----

COURSE DESCRIPTIONS

Following is a list of descriptions for courses typically offered to Brenham high school students. Whether or not a particular course is offered at a given school depends on faculty expertise, student demand, master schedule, etc.

Most semester courses carry one-half (.5) unit of credit. A course running two semesters carries one (1.0) unit of credit (1 unit = 1 year-long course). Any prerequisite or required tests are listed with the course. If there are no prerequisites or required tests, this portion is not listed in the course description.

The course descriptions note the placement levels available for the course. Honors courses indicate placement for students who have mastered prerequisite skills and knowledge that would allow for a faster pace of instruction and/or more in-depth coverage of the TEKS for that course.

BISD provides Special Education programs and services for students who meet eligibility criteria established by the Texas Education Association. An Individualized Education Program (IEP) is developed for students who need specialized instruction. See page 73 for more information.

ENGLISH LANGUAGE ARTS

REGULAR ENGLISH PROGRAM

Emphasis will be on fundamental language, reading, and writing skills. The program will emphasize vocabulary, composition skills, research skills, and provide the students with a variety of writing strategies. These courses include studies of short stories, poetry, the novel, drama, non-fiction, and myths.

0511 **ENGLISH I**
GR. 9 CREDIT: 1

0521 **ENGLISH II**
PREREQUISITE: English I
GR. 10 CREDIT: 1

0531 **ENGLISH III**
PREREQUISITE: English II
GR. 11 CREDIT: 1

0541 **ENGLISH IV**
PREREQUISITE: English III
GR. 12 CREDIT: 1

5240 **BUSINESS ENGLISH**
PREREQUISITE: English III
GR. 12 CREDIT: 1 This course provides students with the communication tools that can lead to success in the business world. Students apply technical skills; employment opportunities, letters of application, resumes, application forms, and interviews. Students enhance reading, writing, computing, communication, and reasoning skills, and apply them to the business environment. **Counts for 4th Eng.**

ADVANCED ENGLISH PROGRAM

English I PreAP and English II PreAP are designed to prepare students for the English Advance Placement Exam given at the junior and senior level. This course includes extensive independent reading in all genres of world literature, development of higher level critical thinking skills, and the use of the writing process to compose various forms of discourse for a variety of audiences and purposes. **Students must be prepared to devote considerable hours to independent readings and outside projects.**

0512 **ENGLISH I PRE-ADVANCED PLACEMENT**
GR. 9 WEIGHTED CREDIT: 1

0522 **ENGLISH II PRE-ADVANCED PLACEMENT**
GR. 10 WEIGHTED CREDIT: 1

0532 **ENGLISH III AP LANGUAGE & COMPOSITION**
GR. 11 WEIGHTED CREDIT: 1

English III AP Language & Composition is designed to provide college bound students an opportunity to prepare for the AP Language & Composition exam. This course is designed to engage students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. The students will have the opportunity to take the Advanced Placement exam for English Language & Composition at the end of the course. Students must be prepared to devote considerable time to writing.

0542 **ENGLISH IV AP LITERATURE & COMPOSITION**
GR. 12 WEIGHTED CREDIT: 1

English IV AP is designed to provide college level studies and is designed for students with an above average ability in English III who are planning to enter a four-year university upon high school graduation. Students will read and analyze British literary works in class and will read widely outside class. The instruction provides the students with sophisticated techniques for success in writing on a college level. The students will have the opportunity to take the Advanced Placement exam for English



Literature & Composition at the end of this course.

2511 (AMA) 2512 (AMA) 2513 (PMA) 2514 (PMB)

DUAL CREDIT ENGLISH IV A/B

PREREQUISITE: English III, BHS GPA of 2.75 or above; Student must take the TSIA test given through Blinn College and have a passing grade. Participant must pay for course tuition, required books, & misc. fees.

GR. 12 WEIGHTED CREDIT: 1

MATHEMATICS

1011 ALGEBRA I

PREREQUISITE: Teacher approval

GR. 9 CREDIT: 1

Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. 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.

1012 ADVANCED ALGEBRA I

PREREQUISITE: 90+ 8th grade Math, 1700 + STAAR Math

GR. 9 WEIGHTED CREDIT: 1

Study of functions with an emphasis on analyzing relationships using a variety of representations including concrete models, algebraic methods and the graphing calculator. Course includes higher level thinking skills, algebraic projects and is intended to prepare students for advanced track mathematics. A minimum of 15 students must qualify for this course in order for it to be offered.

1040 ALGEBRAIC REASONING

PREREQUISITE: Algebra 1

GR. 11-12 CREDIT: 1 COURSE: 1040

This course will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions.

1021 GEOMETRY

PREREQUISITE: Algebra I

GR. 9-12 CREDIT: 1 COURSE: 1021

Students will begin to focus on more precise terminology and symbolic representations. Students will explore concepts covering coordinate and transformational geometry; constructions; similarity, and trigonometry; two- and three-dimensional figures; circles; and probability.

1022 ADVANCED GEOMETRY

PREREQUISITE: Teacher approval; 80 or above - Advanced Algebra I; 90 or above - Algebra I

GR. 9-10 WEIGHTED CREDIT: 1

Students will begin to focus on more precise terminology and symbolic representations. Students will explore concepts covering coordinate and transformational geometry; constructions; similarity, and trigonometry; two- and three-dimensional figures; circles; and probability. The level of instruction/curriculum will focus on preparing the student for advanced placement mathematics courses.

This course is offered in conjunction with Blinn College freshman-level English 1301-1302. Students enrolling must be highly self-motivated and should possess an eagerness to investigate the nature of our language and literature. Blinn schedules are subject to change.

5236 FINANCIAL MATHEMATICS

PREREQUISITE: Algebra 1

GR. 11-12 CREDIT: 1

Financial Mathematics is a course about personal money management. Students will apply critical thinking skills to analyze personal financial skills based upon the current and projected economic factors. Math and calculations related to real world experiences include some of the following: net pay, income taxes, calculate mortgage payment, property taxes, mortgage insurance, closing costs, interest costs, etc.

1031 ALGEBRA II

PREREQUISITE: Teacher approval; 80+ Algebra I & Geometry or credit in Math Models

GR. 11-12 CREDIT: 1

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.

1032 ADVANCED ALGEBRA II

PREREQUISITE: Teacher approval; 85 or above - Advanced Algebra I and Advanced Geometry

GR. 10-11 WEIGHTED CREDIT: 1

Incorporates a more in-depth study of higher level thinking skills, abstract reasoning, and analytical thought processes into the content of the regular course. Concentration will be placed on independent study involving more complex problems.

1041 PRECALCULUS

PREREQUISITE: Teacher approval; 80 or above in Algebra II

GR. 12 CREDIT: 1

Precalculus is the preparation for calculus. The course approaches topics from a function point of view, and is designed to strengthen conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. The study of Precalculus 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.

1042 ADVANCED PRECALCULUS

PREREQUISITE: Teacher approval (Adv. Junior & Senior); 85 or above - Advanced Algebra II; 90 or above - Algebra II

GR. 11-12 WEIGHTED CREDIT: 1

Precalculus is the preparation for calculus. The course approaches topics from a function point of view, and is designed to strengthen conceptual understanding and mathematical

reasoning used when modeling and solving mathematical and real-world problems. The study of Precalculus 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. The level of instruction/curriculum will focus on preparing the student for advanced placement mathematics courses.

1052 ADVANCED PLACEMENT CALCULUS

PREREQUISITE: Adv Pre-Cal - passed & teacher recommended
GR. 12 WEIGHTED CREDIT: 1

An accelerated study of elementary functions; limits of a function; derivatives; integrals and techniques of integration; and applications of calculus to real-world problems in the fields of life science, business and economics, social science, physics and engineering. This course is designed for students who will take the AP exam for college credit.

1050 STATISTICS

PREREQUISITE: Algebra 1
GR. 11-12 CREDIT: 1

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. .

1054 ADVANCED PLACEMENT STATISTICS

PREREQUISITE: Advanced Algebra II
GR. 11-12 WEIGHTED CREDIT: 1

This course provides college-level instruction in statistics, including an accelerated study of data, planning a study, anticipating patterns using probability and simulation and statistical inference. This course is designed for students who will take the AP exam for college credit.

1036 MATH MODELS WITH APPLICATIONS

PREREQUISITE: teacher approval
GR. 11-12 CREDIT: 1

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.

5206 AP COMPUTER SCIENCE A

PREREQUISITE: AP Computer Science Principles
GR. 9-12 CREDIT: 1

AP Computer Science A is the equivalent of a first-semester, college-level course in computer science. The course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design and abstraction. Students enrolling in AP Computer Science A should have knowledge of mathematics at the Algebra II level as well as some previous programming experience, a basic understanding of networks, and knowledge of the responsible use of computer systems. This course counts as an advanced math credit.

5532 Robotics II

GR. 10-12 CREDIT: 1
Prerequisite: Robotics I.

In 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. Note: This course satisfies a math credit requirement for students on the Foundation High School Program.

SCIENCES

1511 BIOLOGY Level 1

ENTRY LEVEL SCIENCE REQUIRED FOR GRADUATION
GR. 9-10 CREDIT: 1

Students investigate the structure and function of living organisms and the environment in which they live, using a variety of instructional strategies, including a special emphasis on laboratory experiences and real world application.

1512 BIOLOGY -ADVANCED Level 1

PREREQUISITE: Teacher approval; 85 or above Adv. 8th grade Science; passed 8th grade Science EOC
GR. 9 WEIGHTED CREDIT: 1

This course is designed to prepare the student for advanced placement biology. Covered will be the fundamental areas of biology with a more extensive approach and additional laboratory exercises. Students conduct laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and inquiry based problem-solving. An independent research project is required. Two science/biology novels will be read and tested on in this course as well. **THE STUDENT MUST MAINTAIN A PASSING**

AVERAGE FOR THE FALL SEMESTER TO CONTINUE IN THE PRE-AP COURSE. FAILURE TO DO SO WILL RESULT IN THE STUDENT BEING MOVED OUT OF THE PRE-AP COURSE TO A REGULAR LEVEL CLASS.

1562 BIOLOGY - ADVANCED Level 2

PREREQUISITE: Teacher approval; grade 85 or higher in Biology or Pre Advanced Placement Biology; grade 85 or higher in Chemistry or PreAdvanced Chemistry
GR. 11-12 WEIGHTED CREDIT: 1

The College Board's Advanced Placement (AP) Biology program provides able and motivated students with an opportunity to pursue college-level biological studies. The three main areas covered are molecules and cells, genetics and evolution, and organisms and populations which include twelved quantitative laboratory exeries.

1501 INTEGRATED PHYSICS & CHEMISTRY (IPC)

PREREQUISITE: If IPC is selected as a science credit, it must be taken before chemistry or physics.

Note: IPC does not count as a science credit on the Science STEM endorsement, but it does count as a science credit on all other STEM endorsements.

GR. 9-10 CREDIT: 1

This course introduces the basic concepts of physics and chemistry. Semester one topics include elements, compounds, chemical reactions, solutions, acids and bases. Semester two physics topics include motion, forces, simple machines, light, sound, and electricity.

1531 CHEMISTRY Level 1

PREREQUISITE: Teacher approval; Grade 75 or higher in Biology, Pre Advanced Placement Biology & Algebra I; Must have passed Algebra I EOC & Biology EOC

GR. 10 CREDIT: 1

Students study a variety of topics that include: characteristics of matter; energy transformations during physical and chemical changes; atomic structure; periodic table of elements; behavior of gases; bonding; nuclear fusion and nuclear fission; oxidation-reduction reactions; chemical equations; solutes; properties of solutions; acids and bases; and chemical reactions. Students will investigate how chemistry is an integral part of our daily lives.

1532 or 1533 - GT

CHEMISTRY - ADVANCED Level 1

PREREQUISITE: Teacher approval; Grade 85 or higher in Biology or Pre Advanced Placement Biology; Grade 85 or higher in Algebra I; Passed 9th grade Math & Science EOC

GR. 10 WEIGHTED CREDIT: 1 For the student who plans to take Advanced Placement Chemistry in their senior year, this course is designed to prepare the student for college-level chemistry lecture and laboratory work. Covered will be the fundamental areas of chemistry with a more extensive approach. Laboratories will mesh with the AP Chemistry laboratories. An independent research project is required. **THE STUDENT MUST MAINTAIN A PASSING AVERAGE FOR THE FALL SEMESTER TO CONTINUE IN THE PRE-AP COURSE. FAILURE TO DO SO WILL RESULT WITH THE STUDENT MOVING OUT OF THE PRE-AP COURSE TO A REGULAR LEVEL CLASS.**

1552 or 1553-GT CHEMISTRY - ADVANCED Level 2

PREREQUISITE: Teacher approval; 85+ in Chemistry or Pre Advanced Chemistry; 85+ in Algebra I & Algebra II; passed last science and math EOC test

GR. 11-12 WEIGHTED CREDIT: 1

The College Board's Advanced Placement (AP) Chemistry program provides able and motivated students with an opportunity to pursue college level chemistry studies. AP Chemistry is an in-depth study of chemical concepts and principles encountered in Chemistry. It also integrates the specialized areas of chemistry such as organic chemistry, quantitative and qualitative analysis, and nuclear chemistry. Students may opt to take the AP Chemistry Examination in May in order to obtain credit and/or placement at college. * A minimum of 5 students must be enrolled for this class to be offered.

1541 PHYSICS Level 1

PREREQUISITE: Teacher approval; 75+ in Chemistry or Chemistry Pre Advanced Placement; grade 75 or higher in Algebra I and Algebra II; passed 9th grade Science & Math EOC

GR. 11 CREDIT: 1

This course provides a conceptual approach to physics, with emphasis on mathematical problem solving. Students study a variety of topics that include: laws of motion; changes within physical systems and conservation of energy and momentum; force; thermodynamics; characteristics and behavior of waves; and quantum physics. This course provides students with a conceptual framework, factual knowledge, and analytical and scientific skills. Students conduct laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving.

1542 PHYSICS - ADVANCED Level 1

PREREQUISITE: Teacher approval; 85+ in Chemistry or Pre Advanced Chemistry, Algebra I and Algebra II; enrolled in Pre Calculus; Passed 9th grade Math & Science EOC

GR. 11 WEIGHTED CREDIT: 1

For the student who plans to take an Advanced Placement Physics course in their senior year, this course is designed to prepare the student for college-level physics lecture and laboratory work. Covered will be the fundamental areas of physics with a more extensive approach. Laboratories will mesh with the physics laboratories. An independent research project is required. **THE STUDENT MUST MAINTAIN A PASSING AVERAGE FOR THE FALL SEMESTER TO CONTINUE IN THE PRE-AP COURSE. FAILURE TO DO SO WILL RESULT WITH THE STUDENT MOVING OUT OF THE PRE-AP COURSE TO A REGULAR LEVEL CLASS.**

1545 PHYSICS ADVANCED Level 2

PREREQUISITE: Teacher approval; 85 or higher in Physics/ Physics-PreAP; 85 or higher in Algebra I & Algebra II

GR. 12 WEIGHTED CREDIT: 1

The College Board's Advance Placement (AP) program provides able and motivated students the opportunity to pursue college level physics studies. Students may opt to take the AP Physics Exam in May in order to obtain credit and/or placement in college. AP Physics is an in-depth study of the laws that govern the physical world and the mathematics behind them. Lab work will be used to reinforce the concepts. Major concepts include mechanics, energy, waves, and nuclear physics. * A minimum of 5 students must be enrolled for this class to be offered.

5141 ADVANCED ANIMAL SCIENCE

PREREQUISITE: 1 course credit in AFNR cluster

GR. 11-12 CREDIT: 1

Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences. Topics to be covered include, but are not limited to, principles relating to human, scientific and technological dimensions of scientific animal agriculture, principles of reproduction and breeding as related to livestock improvement. Examine and compare animal anatomy and physiology in livestock. . THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.

5332 ANATOMY & PHYSIOLOGY

PREREQUISITE: Biology

GR. 10-12 CREDIT: 1

Comprehensive study of the systems of the human body, which begins with a review of cellular biology and histology. This builds a foundation for the study of higher level organ systems and functions. Major mammalian dissection included. Anatomy and Physiology provides a firm foundation for further studies in careers in health care, such as medicine, nursing, dentistry, physical/occupational therapy, and emergency/first-aid as well as careers in coaching and athletic training. Statewide articulated class - 3 hours college credit possible. Students interested in college credit must make a "B" or higher. THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.

5541 SCIENTIFIC RESEARCH & DESIGN IN AGRICULTURE

PREREQUISITE: either Biology, Chemistry, Physics, or IPC

GR. 11-12 CREDIT: 1

This course is for seniors seeking a fourth year science credit. A laboratory-oriented course designed to take an in-depth look at the scientific production of agricultural products. This course will emphasize the importance of agricultural production to the Texas, U.S., and the world economy. This course will explore farm and ranch development, soil and water conservation, beef cattle production, horse production, animal health, range management, wildlife management, forestry management, water and pond management, aquaculture, sheep and goat management, forage production, animal nutrition, marketing, financing and record keeping, crop production, horticulture production, mechanized agriculture, and urban agriculture products. THIS CLASS WILL COUNT AS A 4TH YEAR SCIENCE



5431 FOOD SCIENCE

PREREQUISITE: 3 units of science, including Biology and Chemistry,

GR. 11-12 CREDIT: 1

In food science, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Food science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. THIS CLASS WILL COUNT AS A 3rd or 4th YEAR SCIENCE.

5331 PATHOPHYSIOLOGY (Nature of Disease)

PREREQUISITE: Biology

GR. 11-12 CREDIT: 1

Students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Students in Pathophysiology study disease processes, and how human systems are affected. Emphasis is placed on prevention and treatment of diseases. Students will differentiate between normal and abnormal physiology. THIS CLASS WILL COUNT AS A 3rd or 4th YEAR SCIENCE.

5840 FORENSIC SCIENCE

PREREQUISITE: Biology and Chemistry

GR. 11-12 CREDIT: 1

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime sciences, such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science. THIS CLASS WILL COUNT AS A 3rd or 4th YEAR SCIENCE.

5142 Advanced Plant and Soil Science

GR. 11-12 CREDIT: 1

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. THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.

SOCIAL STUDIES

2011 WORLD GEOGRAPHY

GR. 9-10 CREDIT: 1

Emphasizes cause/effect between man and the environment and also between social groups. Focus is placed on the development of culture and how culture interacts within the major themes of geography: location, place, regions, movement, man/environment interaction. Students will be required to demonstrate geographic literacy skills through map tests throughout the course.

2012 PRE-ADVANCED WORLD GEOGRAPHY

PREREQUISITE: Teacher approval

GR. 9 WEIGHTED CREDIT: 1

This course emphasizes cause/effect between man and the environment, and between social groups. Focus is placed on the development of culture and how culture interacts within the major themes of geography: location, place, regions, movement and man/environment interaction. Research projects, involving the gathering of resources beyond the classroom will be required. Strong writing skills are recommended. Students will also be required to demonstrate geographic literacy skills through map tests throughout the course. Although a weighted course, this course is NOT tied to a College Board Advanced Placement exam, therefore no college credit will be granted.

2021 WORLD HISTORY

GR. 9-10 CREDIT: 1

A history of the world from primitive man in Egypt, China, India, Africa, and America to the Greek and Roman periods; the Age of Monarch; Industrial Progress; Era of Revolution; Nationalism and Imperialism to present events in history.

2015 ADVANCED PLACEMENT HUMAN GEOGRAPHY

GR: 9 WEIGHTED CREDIT: 1

Students in the AP Human Geography course learn to employ spatial concepts and landscape analysis to examine human/environment interactions. Also, methods and tools geographers use in research and applications in areas such as agriculture, culture, population trends, development and urbanization are taught. This course requires a commitment to outside reading and writing. Students will be required to demonstrate geographic literacy through map tests throughout the course. The curriculum is determined by the College Board Advanced Placement Geography standards. College credit is granted upon successful completion of an AP exam.

2022 ADVANCED PLACEMENT WORLD HISTORY

PREREQUISITE: Teacher approval

GR. 10 WEIGHTED CREDIT: 1

This course is designed for students who want an enriched and challenging history course while meeting the state course requirements. The approach to the history of the world will be global, comparative and analytical. It will mean a commitment to outside reading, writing, and research at a college level. The curriculum is determined by the College Board Advanced Placement World History standards, College credit is granted upon successful completion of an AP exam.

2031 U.S. HISTORY SINCE RECONSTRUCTION

PREREQUISITE: World Geography OR World History

GR. 10-11 CREDIT: 1

Studies the record of America's history from after reconstruction to the present. Helps students understand the present and prepare for the future. Students are stimulated to study motives and viewpoints and to become wiser, more democratic citizens.

2036 ADVANCED PLACEMENT U.S. HISTORY

PREREQUISITE: Teacher approval

GR. 11 WEIGHTED CREDIT: 1

The AP History course focuses on the development of historical thinking skills; chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative, and an understanding of content learning objectives organized around seven themes. In line with college and university U.S. history survey courses, this AP U.S. History course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present. This course is determined by the College Board Advanced Placement United States History standards. College credit is granted upon successful completion of AP exam.

2532 (AM) 2534 (PM) DUAL CREDIT U.S. HISTORY STUDIES

PREREQUISITE: BHS GPA of 2.75 or above; Students must pass the Blinn College TSIA. Must attend Blinn Orientation. Blinn schedules are subject to change. Participant must pay for course tuition, required books, & misc. fees.

GR. 11 WEIGHTED CREDIT: 1

This class is offered in conjunction with American History I/II, Course HIST 1301/1302.

2034 AP EUROPEAN HISTORY, 1450 TO PRESENT

PREREQUISITE: Teacher approval

GR. 11-12 WEIGHTED CREDIT: 1

This course is designed for students who want an enriched and challenging history course while meeting the state course requirements. This course curriculum is determined by the College Board Advanced Placement European History standards. The approach to the history of Europe will include global, comparative and analytical instruction. It will mean a commitment by students to outside reading, writing and research during the school year, that is set at college level. College credit is granted upon successful completion of AP exam.

2041 GOVERNMENT

PREREQUISITE: World Geography, World History and US History

GR. 12 CREDIT: 1/2

Emphasis is placed upon: the development and nature of the Constitution of the U. S. ; a study of the Congress, Executive Branch, and Judicial Branch of Government; also rights of the states, political parties, election, civil rights, state and local government. The student of free enterprise and its place in affecting local, state and national governments.

2043 ADVANCED PLACEMENT GOVERNMENT AND POLITICS

PREREQUISITE: Teacher approval

GR. 12 WEIGHTED CREDIT: 1/2

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning assess causes and consequences of political events, and interpret data to develop evidence-based arguments. This course is determined by the College Board Advanced Placement United States Government and Politics standards. College credit is granted upon successful completion of AP exam.

2541 (AM) 2543 (PM) DUAL CREDIT GOVERNMENT

PREREQUISITE: BHS GPA of 2.75 or above; Students must pass the Blinn College TSIA. Must attend Blinn Orientation. Blinn schedules are subject to change. Participant must pay for course tuition, required books, & misc. fees.

GR. 12 WEIGHTED CREDIT: 1/2

This class is offered in conjunction with Blinn College American Government-Federal, GOVT 2305. Students must pass the TASP test at Blinn College and register through Blinn College. Must take the THEA / Accuplacer and have passing scores.

2050 ECONOMICS AND FREE ENTERPRISE

PREREQUISITE: World Geography, World History and US History

GR. 12 CREDIT: 1/2

Study of our economic system that is characterized by private corporate ownership of capital goods, by investments that are determined by private decisions rather than by state control, and by prices, production and the distribution of goods that are determined in a free manner.

2053 ADVANCED PLACEMENT MICROECONOMICS

PREREQUISITE: Teacher approval

GR. 12 WEIGHTED CREDIT: 1/2

AP Microeconomics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. This course is determined by the College Board Advanced Placement Microeconomics standards. College credit is granted upon successful completion of AP exam.

2551 (AM) 2553 (PM) DUAL CREDIT ECONOMICS

PREREQUISITE: BHS GPA of 2.75 or above; Students must pass the Blinn College TSIA. Must attend Blinn Orientation. Blinn schedules are subject to change. Participant must pay for course tuition, required books, & misc. fees

GR. 12 WEIGHTED CREDIT: 1/2

This class is offered in conjunction with Blinn College Principles of Economics, ECON 2301.

2033 ADVANCED AFRICAN AMERICAN STUDIES

PREREQUISITE: Teacher Approval

GR. 10-12 WEIGHTED CREDIT: 1

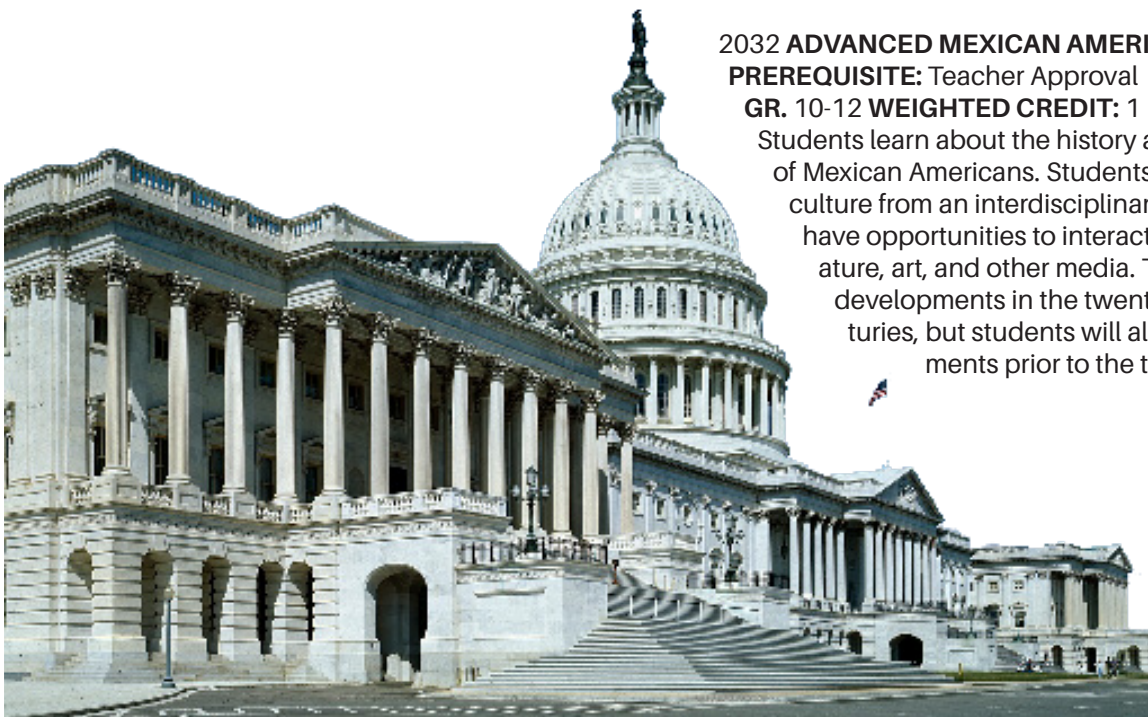
Advanced African American Studies, an elective course, students learn about the history and cultural contributions of African Americans. This course is designed to assist students in understanding issues and events from multiple perspectives. This course develops an understanding of the historical roots of African American culture, especially as it pertains to social, economic, and political interactions within the broader context of United States history. It requires an analysis of important ideas, social and cultural values, beliefs, and traditions. Knowledge of past achievements provides citizens of the 21st century with a broader context within which to address the many issues facing the United States.

2032 ADVANCED MEXICAN AMERICAN STUDIES

PREREQUISITE: Teacher Approval

GR. 10-12 WEIGHTED CREDIT: 1

Students learn about the history and cultural contributions of Mexican Americans. Students will explore history and culture from an interdisciplinary perspective. They will have opportunities to interact with relevant film, literature, art, and other media. The course emphasizes developments in the twentieth and twenty-first centuries, but students will also engage with developments prior to the twentieth century.



LANGUAGES OTHER THAN ENGLISH

4010 SPANISH I

PREREQUISITE: 80+ in English; Incoming Freshmen: 80+ in English & Math (excluding Algebra I)

GR. 9-12 CREDIT: 1

Emphasis is placed upon speaking, understanding, reading, and writing the language. After successfully completing Spanish I, students will be able to communicate in simple Spanish.

4020 SPANISH II (REGULAR)

PREREQUISITE: Spanish I - Grade 70 or above

GR. 9-12 CREDIT: 1

Designed for students not planning to take Spanish III or dual credit Spanish. Emphasis is placed upon speaking, reading, writing, and listening comprehension of the language. After successfully completing Spanish II-R, students will be able to communicate in basic, multiple tenses of Spanish, with more focus on every-day vocabulary and less emphasis on the complex grammatical structures necessary for success in Spanish III.

4022 SPANISH II (ADVANCED)

PREREQUISITE: Spanish I - Grade 80 or above

GR. 9-12 WEIGHTED CREDIT: 1

Designed for students who plan to take Spanish III and/or dual credit Spanish. Emphasis is placed upon speaking, reading, writing, and listening comprehension of the language. After successfully completing Advanced Spanish II, students will be able to communicate in basic, multiple tenses of Spanish with focus on the more complex vocabulary and grammatical structures necessary for success in Spanish III.

4032 SPANISH III

PREREQUISITE: Advanced Spanish II with teacher approval

GR. 10-12 WEIGHTED CREDIT: 1

Advanced Spanish III is designed for students on the Distinguished Achievement Plan, and/or who plan to take AP Spanish IV or dual credit Spanish, to enrich and reinforce all levels of communication to better prepare the students for the rigor of the AP Spanish and dual credit Spanish courses.

4040 ADVANCED PLACEMENT SPANISH IV

PREREQUISITE: Spanish III with teacher approval

GR. 11-12 WEIGHTED CREDIT: 1

This is a course designed to maintain language skills through the study of Spanish literature and culture, discussions in the target language, and writing compositions in the target language. Emphasis is placed on helping the student do well on the AP Spanish exam and college placement tests in Spanish. Student must be self-motivated and able to work independently.

4110 FRENCH I

PREREQUISITE: 80+ in English & Math for incoming freshmen

GR. 9-12 CREDIT: 1

An introduction to French language and culture, with an emphasis on grammar. Students will learn the present tense structure of verbs, and beginning usage of the past tense. Students will learn to communicate using basic language skills and vocabulary.

4120 FRENCH II

PREREQUISITE: French I

GR. 10-12 CREDIT: 1

The course is a continuation of French I with emphasis on progression of grammar structures and vocabulary. The course emphasizes various tenses, speaking, writing, beginning reading and culture of French speaking peoples. At the end of the course, the student will have a solid background as to how the language works and will be able to further their base knowledge on their own.

4130 FRENCH III

PREREQUISITE: French II with teacher approval

GR. 11-12 CREDIT: 1

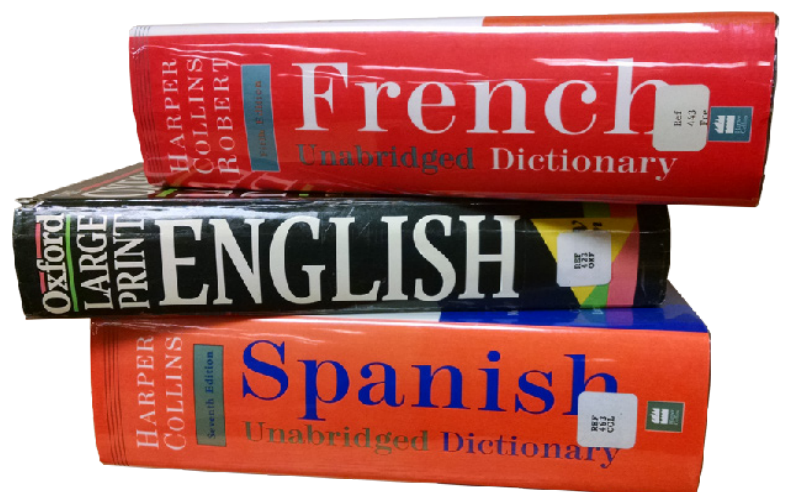
French III is designed for students on the Distinguished Achievement Plan. This upper level class gives the student a solid background in French, enabling them to be successful in college level French courses or if they prefer, to CLEP out of college level introductory courses. It is a continuation of the language, emphasizing advanced verb tenses and structures as well as an introduction to French history. Writing, listening, speaking skills are maintained. Beginning with the Class of 2021 (freshmen in 2016-2017), this course will be a weighted credit on a 5.0 grade scale.

4140 FRENCH IV

PREREQUISITE: French III with teacher approval

GR. 11-12 CREDIT: 1

This is a course to maintain language skills until the student reaches college-level classes. Students will study French history and participate in discussions in the target language as well as develop more advanced composition skills. This course will give the student an even better foundation for success in college level French language and history. Beginning with the Class of 2021 (freshmen in 2016-2017), this course will be a weighted credit on a 5.0 grade scale.



TECHNOLOGY APPLICATIONS

5215 PRINCIPLES OF INFORMATION TECHNOLOGY

GR. 9-12 CREDIT: 1

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workplace and post-secondary 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. Statewide articulated class - 3 hours college credit possible. Students interested in college credit must make a "B" or higher.

5207 AP COMPUTER SCIENCE PRINCIPLES

PREREQUISITE: Algebra 1

GR. 9-12 CREDIT: 1

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. The course instructional materials are based on concepts outlined by the College Board and prepares students to take the Advanced Placement Computer Science Principles Examination.

5206 AP COMPUTER SCIENCE A

GR. 10-12 CREDIT: 1

AP Computer Science A is the equivalent of a first-semester, college-level course in computer science. The course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design and abstraction. Students enrolling in AP Computer Science A should have knowledge of mathematics at the Algebra II level as well as some previous programming experience, a basic understanding of networks, and knowledge of the responsible use of computer systems (including system reliability, privacy, legal issues, intellectual property, and the social and ethical ramifications of computer use). This course counts as an advanced math credit.

5630 GRAPHIC DESIGN & ILLUSTRATION

GR. 9-12 CREDIT: 1

Students will be expected to develop an understanding of the graphic design industry with a focus on fundamental elements and principles of visual art and design. This course provides training in fundamental use of digital layout programs. Students explore basic graphic design techniques to design and develop layouts and compositions for products and businesses. This course introduces drawing strategies, concepts, and specialized illustration techniques used by designers and illustrators.

5531 ROBOTICS I

GR. 10-12 CREDIT: 1

Students enrolled in this course will demonstrate knowledge and skills necessary for the robotics and automation industry. Through implementation of the design process, students will transfer advanced academic skills to component design 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 robotics and automation industry.

5532 Robotics II

GR. 10-12 CREDIT: 1

Prerequisite: Robotics I.

In 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. Note: This course satisfies a math credit requirement for students on the Foundation High School Program.

5223 Global Business

GR. 10-12 CREDIT .5

Global Business is designed for students to analyze global trade theories, international monetary systems, trade policies, politics, and laws relating to global business as well as cultural issues, logistics, and international human resource management.

This course should be taken with Virtual Business. This course will fulfill the technology credit when taken with Virtual Business.

5637 VIRTUAL BUSINESS

GR. 10-12 CREDIT: .5

If you love to shop this business class teaches you the business basics and exposes the secrets of retailing. Students learn the tough business decisions that impact their common shopping experiences - why stores are located where they are, how stores decide to price products, etc. Retailing, students start with a familiar grocery/convenience store. As their retail knowledge deepens, students later manage sporting goods and electronics retailers.

This course should be taken with Global Business. This course will fulfill the technology credit when taken with Global Business.



FINE ARTS

4520 MUSIC APPRECIATION I

GR. 9-12 CREDIT: 1

A study of all genres of music from its origins to modern times. Counts as a state approved Fine Art credit for graduation. This course does not require performance participation, other than concert attendance.

ART

4570 ART I

GR. 9-12 CREDIT: 1

Gives basic instruction in design, drawing, painting, print-making, ceramics and sculpture. Fundamental elements and principles of design will be introduced in this course. Students will use a variety of media and techniques in producing their art work.

4572 ART II - DRAWING

PREREQUISITE: Art I with teacher approval only

GR. 10-12 CREDIT: 1

Students will develop their drawing skills with a variety of drawing media. They will express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.

4574 ART III - DRAWING

PREREQUISITE: Art II with teacher approval only

GR. 11-12 CREDIT: 1

Continuation of drawing skills. Students will continue to express their thoughts and ideas creatively, while challenging their imagination.

4575 ART IV - DRAWING

PREREQUISITE: Art III with teacher approval only

GR. 12 CREDIT: 1

Continuation of drawing skills with the student moving towards a more independent approach to his/her drawing assignments in thought and production.



BAND

4515 BAND I

GR. 9 CREDIT: 1

4516 BAND II

PREREQUISITE: Band I

GR. 10 CREDIT: 1

4517 BAND III

PREREQUISITE: Band II

GR. 11 CREDIT: 1

4518 BAND IV

PREREQUISITE: Band III

GR. 12 CREDIT: 1

MARCHING BAND (FALL ONLY)

Comprised of all instrumentalists from the Brenham H.S. Music department, the marching band features a strong emphasis on entertainment and spectacle. The color guard, drum line, drum majors, color, pageantry, and music combine to bring about an experience matched in few BHS courses. Highlights for this group are the weekly performances for football games, marching contests, and parades. The band is marked by highly motivated, skilled individuals in all aspects of instrumental performances.

4501 MARCHING BAND I

GR. 9 CREDIT: 1/2

4502 MARCHING BAND II

PREREQUISITE: Marching Band I

GR. 10 CREDIT: 1/2

4503 MARCHING BAND III

PREREQUISITE: Marching Band II

GR. 11 CREDIT: 1/2

4504 MARCHING BAND IV

PREREQUISITE: Marching Band III

GR. 12 CREDIT: 1/2

SYMPHONIC/CONCERT BAND (SPRING ONLY)

The showcase musical ensembles for BHS, the Symphonic and Concert Band I feature the top instrumentalists from the music department. The Symphonic and Concert Band I perform year-round functions through the marching band, concerts, contests, and the annual spring tour. A high standard of excellence has been the trademark of these groups. Auditions are required for Symphonic Band and Concert Band I. Current members of the High School Symphonic and Concert Band I and eighth graders that are currently enrolled in Honors band should pre-register for the Symphonic/Concert Band I class.

4511 SYMPHONIC/CONCERT BAND I - I

PREREQUISITE: Marching Band

GR. 9 CREDIT: 1/2

4512 SYMPHONIC/CONCERT BAND I - II

PREREQUISITE: Marching Band, Symphonic/Concert Band I - I
GR. 10 CREDIT: 1/2

4513 SYMPHONIC/CONCERT BAND I - III

PREREQUISITE: Marching Band, Symphonic/Concert Band I - II
GR. 11 CREDIT: 1/2

4514 SYMPHONIC/CONCERT BAND I - IV

PREREQUISITE: Marching Band, Symphonic/Concert Band I-III
GR. 10 CREDIT: 1/2

4510 INSTRUMENTAL TECHNIQUE

PREREQUISITE: Director Permission; Must be enrolled in Marching Band in Fall & Symphonic/Concert Band in Spring
GR. 9-12 CREDIT: 1

This course is an instrumental music class. Students enrolled in this class have the expectation of auditioning for TMEA All Region Band Auditions and performing at a Solo and Ensemble Contest. Students will learn practice techniques, audition strategies, and develop advanced skills on their respective instrument. Director permission is required to register for this class. It is expected that students will be enrolled in Marching Band (Fall) and Symphonic/Concert Band (Spring). Exceptions will be made on a case by case basis due to extenuating circumstances. Students must have a band directors signature on their schedule to sign up for this class. This course will be treated as a music appreciation course and will count towards GPA.



CHOIR - CHORAL MUSIC

The BHS Choral Department features four different types of ensembles. Each ensemble stresses the basic fundamentals of music, vocal production, and individual and group performance techniques.

CHORALE

Chorale competes as the BHS Varsity Choir. It is composed of the top male and female vocalists in the program. Performances center around concerts, contests, community activities, invitations, and trips. This group sets the standard for the BHS Choral Department. Quartets are selected from this choir for additional opportunities. After school rehearsals required. Prerequisite for all Chorale Courses is through audition. **Extra time commitment is required.**

| | | | |
|--------------------|------------------|------------------|---------------------|
| CHORALE I | GR. 9-12 | CREDIT: 1 | COURSE: 4531 |
| CHORALE II | GR. 10-12 | CREDIT: 1 | COURSE: 4532 |
| CHORALE III | GR. 11-12 | CREDIT: 1 | COURSE: 4533 |
| CHORALE IV | GR. 12 | CREDIT: 1 | COURSE: 4534 |

CUB CHOIR

This mixed group performs and studies all styles of music. Students will learn how to read music and perform as a group using good vocal technique. Great for beginners as well as advanced singers. This ensemble performs around the community, at concerts and on the annual choir trip. This choir does not conflict with other after school extracurricular activities.

| | | | |
|----------------------|------------------|------------------|---------------------|
| CUB CHOIR I | GR. 9 | CREDIT: 1 | COURSE: 4545 |
| CUB CHOIR II | GR. 10-12 | CREDIT: 1 | COURSE: 4546 |
| CUB CHOIR III | GR. 11-12 | CREDIT: 1 | COURSE: 4547 |
| CUB CHOIR IV | GR. 12 | CREDIT: 1 | COURSE: 4548 |

4535 VOCAL TECHNIQUE

PREREQUISITE: Director Permission
GR. 9-12 CREDIT: 1

This course is a vocal music class. Students enrolled in this class have the expectation of auditioning for TMEA All Region Choirs and performing at UIL Solo and Ensemble contest. Students will learn practice techniques, audition strategies, and develop advanced skills on their respective voice part. Director permission is required to register for this class. It is expected that students will be enrolled in Chorale, Men's Chorus, or Glee. Exceptions will be made on a case by case basis due to extenuating circumstances.

4536-I, 4537-II, 4538-III, 4539-IV BHS WOMEN'S CHORUS

GR. 9-12 CREDIT: 1

This course does not require any previous experience and is great for beginners as well as advanced singers. Students will learn how to read printed music and to perform all styles of music as a group. This group requires no after school time commitments and is eligible to participate in the annual trip.

THEATRE

4561 TECHNICAL THEATRE I

GR. 9-12 CREDIT: 1

This course is designed to give an overview of the behind-the-scenes workings of the stage. We will work with a variety of tools, paint, and machinery to create stage settings, costumes, lighting effects, sound effects, and publicity information. This course is ideal for anyone interested in theatre but scared to death of stage fright. Students are required to attend one free theatre performance at BHS during both semesters.

TECHNICAL THEATRE II-IV

PREREQUISITE: previous Technical Theatre; Teacher approval

This course is designed to give students advanced knowledge in the four basic design areas: sets, lights, costume, and sound. We will be doing practical work on productions presented by the school as well as assisting outside projects that use our facilities. After school requirements will include working at rehearsals and performances of theatre productions.

4562 TECHNICAL THEATRE II

GR. 10-12 CREDIT: 1

4563 TECHNICAL THEATRE III

GR. 11-12 CREDIT: 1

4564 TECHNICAL THEATRE IV

GR. 12 CREDIT: 1

4551 THEATRE ARTS I

GR. 9-12 CREDIT: 1

This course is designed to provide information to beginning actors and actresses. Students will primarily act, but will also learn about many other areas of the theatre. We play theatre games, work on memorization, improvisation, pantomime and performance. Students are required to attend one free theatre performance at BHS during both semesters.

4552 THEATRE ARTS II

PREREQUISITE: Theatre Arts I; Teacher approval

GR. 9-12 CREDIT: 1

This course is designed to advance skills in acting. Scene work will be the focus of this course with an emphasis on blocking and characterization. Students in this course will learn more in depth about a variety of design concepts and how they relate to acting. Students are required to participate in after school/evening theatre productions and rehearsals.

4553 THEATRE ARTS III

PREREQUISITE: Theatre Arts II; Teacher approval

GR. 11-12 CREDIT: 1

This course is designed for students who have an intense interest in acting and/or directing. We will focus on advanced characterization techniques as well as acting periods and genres. Students will have a heavy focus on scene work. Students are required to participate in after school/evening theatre productions and rehearsals.

4554 THEATRE ARTS IV

PREREQUISITE: Theatre Arts III; Teacher approval

GR. 11-12 CREDIT: 1

Students in Theatre Arts IV will focus on preparing a production from beginning to end. They will focus on each task primarily assuming the director's role. Students are required to participate in after school/evening theatre productions and rehearsals.

THEATRE PRODUCTION I-IV

PREREQUISITE: Theatre Arts 2; Teacher audition

Students will apply theatre skills such as acting and stage work to current productions. Many aspects of this class will be tailored for individual students. Student **MUST AUDITION** for this class. Students are required to participate in after school production and rehearsal.

4555 THEATRE PRODUCTION I

GR. 10-12 CREDIT: 1 4556

4556 THEATRE PRODUCTION II

GR. 10-12 CREDIT: 1

4558 THEATRE PRODUCTION III

GR. 10-12 CREDIT: 1

4559 THEATRE PRODUCTION IV

GR. 10-12 CREDIT: 1

4557 COSTUME DESIGN & CONSTRUCTION

PREREQUISITE: Technical Theatre I, Theatre I, or Teacher approval

GR. 9-12 CREDIT: 1

This class examines the art of costuming and trains students in the basics of cutting, draping, stitching, and crafts. In addition to completing Individual Projects, students will learn to design and construct costumes for our productions, organize and maintain a Costume Hall, and the chance to take individual projects to state/ national competition. Students are required to work on after school performance and rehearsals



FLORAL DESIGN

5130 PRINCIPALS & ELEMENTS OF FLORAL DESIGN

GR. 10-12 CREDIT: 1

This course is designed to prepare students for a career in Floral Design. Students will develop the ability to identify and demonstrate the principles and techniques related to floral designs as well as develop an understanding of the management of floral enterprises. Topics to be covered include but are not limited to design principles and techniques in floral art. Develop and formulate ideas from the environment. Demonstrate contemporary design, business practices, specialty items and creativity in the floral industry. Statewide articulated class - 3 hours college credit possible. Students interested in college credit must make a "B" or higher. THIS CLASS WILL COUNT AS A FINE ARTS CREDIT.

DANCE

DANCE (FINE ART CREDIT)

GR. 9-12 CREDIT: 1

COURSE: 4590 - I 4591 - II 4592 - III 4593 - IV

Various disciplines of dance are explored in this course. These disciplines include: jazz, hip-hop, ballet, lyrical, and modern dance. Students will engage in intense choreographic projects, video studies and dance history. This course involves both anaerobic and aerobic activity. Appropriate attire is required and is the responsibility of the student.

3271 - I 3272 - II 3273 - III 3274 - IV BELLES DANCE TEAM I-IV

GR. 9-12 CREDIT: 1 (requires 2 blocks)

Dance Team members will be placed by audition within the appropriate skill level; requirements will include after-school rehearsals and performances; information regarding the required dance attire will be addressed by the instructor; additional fees will be required. This course will satisfy the Fine Art graduation requirement and students will, in addition, receive a P.E. Waiver. Dance Team I - IV provides students with an advanced dance curriculum focused on fast-paced complex movement and technical skills. Students will demonstrate refined kinesthetic and spatial awareness. The culminating activity of these courses incorporates the combined dance skills including choreography and costume/set design for individual and ensemble performances. Membership in the dance team is a full year commitment that includes performances at multiple venues within the district and local communities. **PE credit may be awarded based on successful completion of course.**

OTHER ELECTIVES

4710 DEBATE I

GR. 9-12 CREDIT: 1

Students will learn the basics of debate vocabulary and technique. Students will learn to research a given topic and create a case to present in competition. Students will also study current events and deliver informative and persuasive speeches according to topics they select. This class requires at least one out-of-town tournament per semester.

DEBATE II-IV

PREREQUISITE: previous Debate course; Teacher approval
Students will continue work from the Debate I class. Advanced Theory will be discussed and applied. This class requires at least one out-of-town tournament per semester.

4720 DEBATE II

GR. 10-12 CREDIT: 1

4730 DEBATE III

GR. 11-12 CREDIT: 1

4740 DEBATE IV

GR. 12 CREDIT: 1

AVID (Advancement Via Individual Determination)

PREREQUISITE: Junior High School AVID and/or interview and application process.

CO-REQUISITE: Enrollment in rigorous college preparatory courses (Advanced/PreAP/AP classes).

The AVID course is an elective class for students who are college bound. The AVID curriculum focuses on writing, inquiry, collaboration, organization and reading (WICOR) through the AVID high school curriculum in both teacher and tutor-led activities. While concurrently enrolled in college-prep courses, student learn strategies to enhance success.

HEALTH & PHYSICAL EDUCATION

Individual/Team Sports, Weight Training and Fitness, Dance and Belles Dance Team are courses that satisfy the physical education state requirement.

3300 HEALTH EDUCATION

GR. 9-10 CREDIT: 1/2 Provides an introduction to health facts which develop proper attitudes, establish practices and habits that will contribute to personal, family, and community health. Required course for Brenham High School Graduation.

PHYSICAL EDUCATION

The Physical Education class students are required to suit out daily in the school issued uniforms: green gym shorts, a plain T-shirt, and proper gym tennis shoes. Students are required to wear the school issued physical education uniform during class. If a student does not wear the school issued uniform, he/she will not receive credit for the course.

3005 - I & 3006 - II INDIVIDUAL/TEAM SPORTS I & II

GR. 9-12 CREDIT: 1/2 Intramural/Fitness for Life. Some daily aerobic activities will also be involved. Emphasis will be on team sports. Example: flag football, basketball, volleyball, softball, etc.

3310 SPORTS MEDICINE I

PREREQUISITE: Signature from either BISD certified athletic trainer granting permission to enroll

GR. 9-11 CREDIT: 1 This course provides an opportunity for the study and application of components of sports medicine including but not limited to: sports medicine related careers, recognition, evaluation, prevention, treatment, and rehabilitation of athletic injuries, sports psychology, sports law, first aid, CPR, emergency planning, anatomy, physiology, and nutrition. Students may be required to participate in observation hours outside the class period. This course is a full year course, and does not satisfy the physical education state requirement.

3311 SPORTS MEDICINE II

PREREQUISITE: Sports Medicine I & Signature from either BISD certified athletic trainer granting permission to enroll

GR. 10-12 CREDIT: 1 This course provides a more in-depth study and application of the topics covered in Sports Medicine I. Students will be required to participate in observation hours outside the class period. This course is a full year course, and does not satisfy the physical education state requirement.

3320 ATHLETIC TRAINING INTERNSHIP

PREREQUISITE: Signature from either BISD certified athletic trainer granting permission to enroll

GR. 9-12 CREDIT: 1 This internship is completed during the athletic periods in addition to a large amount of time spent outside the class period, and offers students an opportunity to apply the techniques and theories learned in the classroom (Sports Medicine I and II) through assisting the BISD athletic trainers with medical coverage for the various athletic teams. Students enrolled in the athletic training internship will be held to the same academic requirements and policies as student athletes. Students will travel and work with athletic teams depending on which

sports are in season and what period the student is enrolled in. This class requires long hours spent with teams before or after school, but the opportunities provided for athletic training experience are unequalled. Students enrolled in this course must provide a current First Aid, CPR, AED certification, and attend a workshop prior to fall sports seasons beginning. Visit Athletics website for more information. This course does not satisfy the physical education state requirement.

WEIGHT TRAINING AND FITNESS I-IV

GR. 9-12 CREDIT: 1/2
COURSE: 3011 - I 3012 - II 3013 - III 3014 - IV
An adequate knowledge of weight training required. Students must have the desire to excel and gain strength. Students will be tested every six weeks for strength gain.

DANCE

GR. 9-12 CREDIT: 1
COURSE: 3279- I, 3280-II, 3281-III, 3282-IV
Various disciplines of dance are explored in this course. These disciplines include: jazz, hip-hop, ballet, lyrical, and modern dance. Students will engage in intense choreographic projects, video studies and dance history. This course involves both anaerobic and aerobic activity. Appropriate attire is required and is the responsibility of the student.

ATHLETICS

GRADE PLACEMENT: 9-12 **CREDIT:** 1/2 - 1

PREREQUISITE: Coach's approval

Designed to enable students who have a desire and ability to excel through competition in sports activities. Both college and non-college bound students are urged to participate in the events in which he/she might excel. Many of the participants have been able to further their education through their participation in our athletic program.

| Sport | Grade Classification | | | |
|----------------------|----------------------|-----------|--------|--------|
| | Freshmen | Sophomore | Junior | Senior |
| FOOTBALL | 3100 | 3101 | 3102 | 3103 |
| VOLLEYBALL | 3200 | 3201 | 3202 | 3203 |
| BOY'S BASKETBALL | 3110 | 3111 | 3112 | 3113 |
| GIRL'S BASKETBALL | 3210 | 3211 | 3212 | 3213 |
| BASEBALL | 3130 | 3131 | 3132 | 3133 |
| SOFTBALL | 3230 | 3231 | 3232 | 3233 |
| BOY'S TRACK | 3140 | 3141 | 3142 | 3143 |
| GIRL'S TRACK | 3240 | 3241 | 3242 | 3243 |
| BOY'S SOCCER | 3120 | 3121 | 3122 | 3123 |
| GIRL'S SOCCER | 3220 | 3221 | 3222 | 3223 |
| BOY'S CROSS COUNTRY | 3150 | 3151 | 3152 | 3153 |
| GIRL'S CROSS COUNTRY | 3250 | 3251 | 3252 | 3253 |
| CO-ED TENNIS | 3170 | 3171 | 3172 | 3173 |
| SWIMMING - AM | 3160 | 3162 | 3164 | 3166 |
| SWIMMING - PM | 3161 | 3163 | 3165 | 3167 |

GOLF - BOYS & GIRLS

PREREQUISITE: New player tryouts required 1st week of Aug.

GR. 9-12 CREDIT: 1

COURSE: 3181 - I 3182 - II 3183 - III 3184 - IV

This course is designed for those individuals with the ability to compete in UIL extra-curricular golf. Extensive after school practice and tournament time is required as well. This is predominately varsity boys, girls and some junior varsity that are able to play in the 100 range or better in 18 holes. There will be a \$200 fee for first year players. This includes a school bag, tournament shirt, shorts, and a cap. Otherwise, the fee is \$50, unless a new bag is needed.

CHEERLEADING

PREREQUISITE: Tryouts required

GR. 9-12 CREDIT: 1

COURSE: 3261 - I 3262 - II 3263 - III 3264 - IV

This class is designed for students who are members of the cheerleading squad. It will include aerobics, leadership skills, some gymnastics, and preparation for upcoming events.



JROTC

JROTC can fulfill the required Physical Education credit for graduation.

6010 ROTC LEADERSHIP EDUCATION I

GR. 9-12 CREDIT: 1

Designed for freshmen or sophomores, Leadership Education I introduces ROTC cadets to the major subjects to lay a foundation for the grade levels to follow. This course emphasizes followship, development of leadership traits, marksmanship training and Marine Corps drill and ceremonies. Cadets are encouraged to join drill team, color guard, rifle shooting teams for competition and travel.



student instructors and normally three year cadets.

6040 ROTC LEADERSHIP EDUCATION IV

GR. 12 CREDIT: 1

The fourth year curriculum shall consist entirely of leadership training. Fourth year leadership training will include participation in the leadership research, and in presentation of leadership talks to students or community groups.

CORE JROTC COMPETITION TEAM I-IV

GR. 9-12 CREDIT: 1

COURSE: 6011 6021 6031 6041

Designed as an advanced ROTC course for all grade levels. These students will cover the curriculum of their respective base ROTC courses and participate as the school's competitive travel team. These cadets are also those responsible for Color Guard detail for sporting events and community serve events.

6020 ROTC LEADERSHIP EDUCATION II

GR. 10-12 CREDIT: 1

Designed for sophomores or juniors. It explores each subject in greater detail than LE I and it emphasizes leadership theory, style, and principles. Student leadership roles are assigned to second year cadets.

ROTC LEADERSHIP EDUCATION SHOOTING I-IV

GR. 9-12 CREDIT: 1

COURSE: 601? 602? 603? 604?

Designed for those student who desire to focus on the shooting aspect of ROTC. Students will cover the curriculum of their respective base ROTC courses, but these courses will provide addition focus on shooting and students in this class will be part of the ROTC shooting team.

6030 ROTC LEADERSHIP EDUCATION III

GR. 11-12 CREDIT: 1

Designed for juniors and seniors. Emphases on leadership training and leadership application. The majority of the cadet leaders are members of rifle teams, drill teams, color guard and

LOCAL CREDIT

STUDENT MUSIC MENTOR (7015)

CHOIR MENTOR (7017)

PREREQUISITE: 2.75 GPA; Band/Choir Director approval

GR. 12 CREDIT: 1/2 - 1 COURSE: 7015 or 7017

Senior band and choir students have the opportunity to work with beginning band and choir students in a private lesson situation at the middle school during eighth period. This course will help students determine their interest in music education as a profession.

OFFICE AIDE (7011)

COUNSELOR AIDE (7010)

PREREQUISITE: 2.75 GPA; Band/Choir Director approval

GR. 12 CREDIT: 1/2 - 1 COURSE: 7011 or 7010

Office aides pick up attendance sheets, sort mail, deliver messages to students and teachers, assist with secretarial tasks, and help run office machines. Applications due by the 2nd Friday in March to the Counseling Office. The Principal and Counseling Department will evaluate all applications.

ACADEMIC DUAL CREDIT

PREREQUISITE: BHS GPA of 2.75 or above; Students must take the TSIA test given through Blinn College and have a passing grade OR be exempt from taking the TSIA based on PSAT, SAT, or ACT scores.

GR. 11-12 WEIGHTED CREDIT: 1/2 - 1

The following academic dual credit courses will be offered in conjunction with Blinn College. These courses will fulfill high school graduation requirements and also provide college credit. Students will be required to purchase all required textbooks. Minimum enrollment is required. These are all weighted courses (5.0 grade scale) for GPA purposes. See your counselor for additional information on Career & Technical Education dual credit courses or Blinn permit courses (seniors only). You must have attended a Blinn College Dual Credit Orientation.

ENGLISH IV (ALL YEAR)

2511 - AM -A
2512 - AM -B
2513 - PM -A
2514 - PM -B

U.S. HISTORY (ALL YEAR)

2532 - AM-A
2534 - AM - B

ECONOMICS/FREE ENTERPRISE

2551 - AM
2553 - PM

U.S. GOVERNMENT

2541 - AM
2543 - PM



HELPING YOU FIND YOUR WAY.

Career and Technical Education programs are dedicated to preparing young people to manage the dual roles of family member and wage earner. CTE programs enable students to gain entry-level employment in a high-skill, high-wage job and/or to continue their education.

The CTE Course Selection Guide contains:

- **Available CTE Courses/Programs**
- **A flowchart for each program of study** which indicates some suggested order for enrolling in classes. Courses taken in a sequence is very beneficial to the student. Upon graduating from high school, the student will have a strong background in a chosen area that may help the student find a job or to pursue a certificate, an associate's degree, or a bachelor's degree in a chosen field. Please consult your counselor or CTE department to help make correct course choices.
- **Course descriptions** with the recommended pre-requisites, grade placement, & course credits.

Brenham ISD does not discriminate on the basis of race, religion, color, national origin, sex, or handicap in vocational educational programs.

House Bill 5 & Graduation Requirements

A school district must ensure that each student, on entering ninth grade, indicates in writing an endorsement that the student intends to earn.

A district shall permit a student to enroll in courses under more than one endorsement before the student's junior year and to choose, at any time, to earn an endorsement other than the endorsement the student previously indicated. This section does not entitle a student to remain enrolled to earn more than 26 credits.

A student may graduate under the foundation high school program without earning an endorsement if, after the student's sophomore year:

- 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
- the student's parent or person in standing in parental relation files with a school counselor written permission, on a form adopted by the agency, allowing the student to graduate under the foundation high school program without earning an

A student may earn an endorsement by successfully completing:

- Curriculum requirements for the endorsement
- Four credits in mathematics
- Four credits in science
- Two additional elective credits

Planning for Success

Our goal at Brenham High School is to prepare every student for life and career success. Because 21st Century careers require high academic and technological skills, students need to identify and pursue both career and academic goals while in high school. After graduating from high school, what will you do? Where will you go? Who will support you? Will you continue your education? Will you work and go to school? If you go to school, what will your major be? These are all very important questions. In order to answer them, you will need to explore your interests so you can make informed decisions about your future.

To help you decide which courses you may want to consider taking in high school, first explore career and educational options with your talents, abilities, goals, and interests in mind. A great resource to help with this exploration are free resources you may find on the internet. These resources will provide information about careers, educational opportunities and much more. Some great resources are already compiled for you at www.brenhamcte.com/careercenter/.

House Bill 5, passed by the 83rd Texas legislature, set new requirements for the class of 2018 and beyond. All students entering 9th grade after the fall of 2014 will be required to take a “core foundation” of academic courses which meet the Foundation High School Plan requirements deemed necessary to pursue post-secondary education. Students then must select an Endorsement which can be chosen from several areas. Choosing a program of study, or Endorsement area, gives the student direction on which electives and advanced courses to take in high school and encourages the wise use of the elective opportunities.



In 8th grade you will begin the process of developing a personalized graduation plan for the next 5 years. Your parents, counselors, and teachers can help develop a graduation plan which identifies and implements a Graduation Endorsement that is right for you.

College and Career Websites

Career Exploration

www.Choices360.com
www.bls.gov/ooh
www.texashotjobs.org
www.careeronestop.org
www.texasgenuine.org
www.twc.state.tx.us

SAT Registration & Prep

www.sat.collegeboard.org
www.khanacademy.org

College Exploration & Applications

www.Choices360.com
www.collegeboard.org
www.comparecollegetx.com
www.applytexas.org
www.commonapp.org
www.collegeforalltexas.com

ACT Registration & Prep

www.act.org

Financial Assistance

www.fafsa.ed.gov
www.studentaid.ed.gov
www.offtocollege.com/financial-aid
www.finaid.org
www.Choices360.com
BISD Local Scholarships

Featured Websites

www.gettschooled.com

TSIA Preparation

<https://secure-media.collegeboard.org/digitalServices/pdf/accuplacer/accuplacer-texas-success-initiative-assessment-sample-questions.pdf>

BHS CTE Courses for 2021-2022 School Year

See the Programs of Study for pre-requisites and a description of the course.

| COURSE | GRADE | CRED-ITS | PAGE |
|--|-------|----------|-----------------------|
| Advanced Animal Science | 11-12 | 1 | 38 |
| Advanced Floral Design | 11-12 | 1 | 40 |
| Agricultural Structures Design and Fabrication | 10-12 | 1 | 39 |
| Anatomy & Physiology | 10-12 | 1 | 60,61,66 |
| Automotive Basics | 9-12 | 1 | 56 |
| Automotive Technology I | 10-12 | 2 | 56 |
| Practicum in Transportation Systems | 12 | 2-3 | 56 |
| Automotive Technology II/Lab | 11-12 | 2-3 | 56 |
| Project Based Research (PALS I) | 11-12 | 1 | 63 |
| Career Preparation I (Co-op) | 11-12 | 2-3 | All Programs of Study |
| Career Preparation II (Co-op) | 12 | 2-3 | All Programs of Study |
| Child Development | 10-12 | 1 | 58,63 |
| Practicum in Education and Training (CARS II) | 12 | 2 | 58 |
| Agricultural Mechanics and Metal Technologies | 9-12 | 1 | 39 |
| Agricultural Power Systems | 11-12 | 2-3 | 39 |
| Robotics II | 10-12 | 1 | 54 |
| AP Computer Science Principles | 9-12 | 1 | 68,69 |
| Practicum in Information Technology | 12 | 2-3 | 69 |
| AP Computer Science A | 10-12 | 1 | 68,69 |
| Agricultural Equipment Design and Fabrication | 12 | 2-3 | 39 |
| Commercial Photography I/Lab | 10-12 | 1-2 | 47 |
| Commercial Photography II/Lab | 11-12 | 1-2 | 47 |
| Construction Management I | 10-12 | 2 | 45 |
| Construction Management II | 11-12 | 2 | 45 |
| Counseling and Mental Health | 11-12 | 1 | 63,65,66 |
| Culinary Arts | 10-12 | 2 | 52 |
| Dollars & Sense | 10-12 | .5 | 63 |
| Equine Science | 10-12 | 1/2 | 38 |
| Fashion Design II/Lab | 11-12 | 1-2 | 47 |
| Practicum in Graphic Design and Illustration | 11-12 | 2-3 | 47 |
| Fashion Design I/Lab | 10-12 | 1-2 | 47 |
| Financial Mathematics | 10-12 | 1 | 50 |
| Food Science | 11-12 | 1 | 52 |
| Practicum in Human Services (PALS II) | 11-12 | 2 | 63 |
| Practicum on Culinary Arts | 12 | 2-3 | 52 |
| Forensic Science | 11-12 | 1 | 65 |
| Graphic Design & Illustration I | 9-12 | 1 | 47 |
| Graphic Design & Illustration II/Lab | 10-12 | 1-2 | 47 |
| Health Science Theory | 10-12 | 1 | 60 |
| Introduction to Culinary Arts | 9-12 | 1 | 52 |
| Law Enforcement I | 10-12 | 1 | 65 |

| COURSE | GRADE | CRED-ITS | PAGE |
|--|-------|----------|-------------|
| Practicum in Ag, Food & Natural Resources | 11-12 | 2-3 | 38,40,41 |
| Law Enforcement II | 11-12 | 1 | 65 |
| Livestock Production | 10-12 | 1 | 38 |
| Medical Terminology | 9-12 | 1 | 60 |
| Pathophysiology | 11-12 | 1 | 60 |
| Practicum in Commercial Photography | 12 | 2 | 47 |
| Advanced Culinary Arts | 11-12 | 2 | 52 |
| Practicum in Health Science (CMA) | 11-12 | 2 | 60 |
| Floral Design | 10-12 | 1 | 40 |
| Principles of Agriculture, Food & Natural Resources | 9-12 | 1 | 38,39,40,41 |
| Practicum in Construction Management | 12 | 2-3 | 45 |
| Practicum in Business Management | 11-12 | 2-3 | 49 |
| Principles of Construction | 9-12 | 1 | 45 |
| Principles of Information Technology | 9-10 | 1 | 69 |
| Principles of Human Services | 9-12 | 1 | 63 |
| Principles of Law, Public Safety, Corrections & Security | 9-12 | 1 | 65,66 |
| Range & Ecology Management | 11-12 | 1 | 41 |
| Practicum in Manufacturing | 12 | 2-3 | 54 |
| Practicum in Law, Public Safety Corrections, & Security | 11-12 | 2-3 | 65,66 |
| Robotics I | 9-10 | 1 | 54 |
| Scientific Research in Agriculture (I and II) | 11-12 | 1 | 38,40,41 |
| Digital Design and Digital Design / Media Production | 10-12 | 1 | 47 |
| Small Animal Management | 10-12 | .5 | 38 |
| Global Business | 10-12 | .5 | 49 |
| Veterinary Medical Applications | 11-12 | 1 | 38 |
| Virtual Business | 10-12 | .5 | 49 |
| Wildlife, Fisheries & Ecology Management | 10-12 | 1 | 41 |
| Turf Grass Management | 10-12 | .5 | 40 |
| Landscape Design and Management | 10-12 | .5 | 40 |
| Advanced Plant and Soil Science | 11-12 | 1 | 40 |
| Principles of Education and Training | 9-12 | 1 | 58 |
| Emergency Medical Technician Basic | 11-12 | 2 | 66 |
| Digital Forensics | 9-12 | 1 | 69 |
| Computer Science I | 9-12 | .5 | 68 |
| Computer Science II | 11-12 | 1 | 68 |
| Foundation of Computer Science | 9-12 | .5 | 68 |
| Foundation of Cybersecurity | 9-12 | 1 | 69 |
| Game Programming and Design | 9-12 | 1 | 68 |
| Instructional Practices (CARS I) | 11-12 | 2 | 58 |
| Range Ecology Management | 10-12 | 1 | 44 |
| Principles of Exercise and Wellness | 9-10 | 1 | 61 |
| Kinesology I | 9-10 | 1 | 61 |
| Accounting I | 10-12 | 1 | 50 |
| Money Matters | 9-10 | 1 | 50 |
| Accounting II | 11-12 | 1 | 50 |

Dual Credit & Career Technical Education

The following courses will be offered in conjunction with Blinn College. These courses will fulfill high school credit and also provide college credit. These courses will be taught on the Brenham High School campus. Some courses may be added closer to the beginning of school. You must have attended a Blinn College Technical Dual Credit Orientation meeting.

GRADE PLACEMENT: 9-12

ADMISSION REQUIREMENTS: Complete a paper or electronic application for Blinn College; Receive written permission from the high school principal; May require a "B" or better average in high school classes; Submit an official high school transcript; Students must take the TSIA test given through Blinn College and have a passing grade.

** Programs of Study narrative descriptions source: Texas Education Agency and Achieve Texas (www.achievetexas.org)

5134 Agricultural Structures Design and Fabrication (Intro to Welding)
5122 Agricultural Power Systems (Welding I)
5119 Agricultural Equipment Design and Fabrication (Welding II)

These Courses Can Be Adapted to Any Career Cluster

5133 **CAREER PREPARATION I**

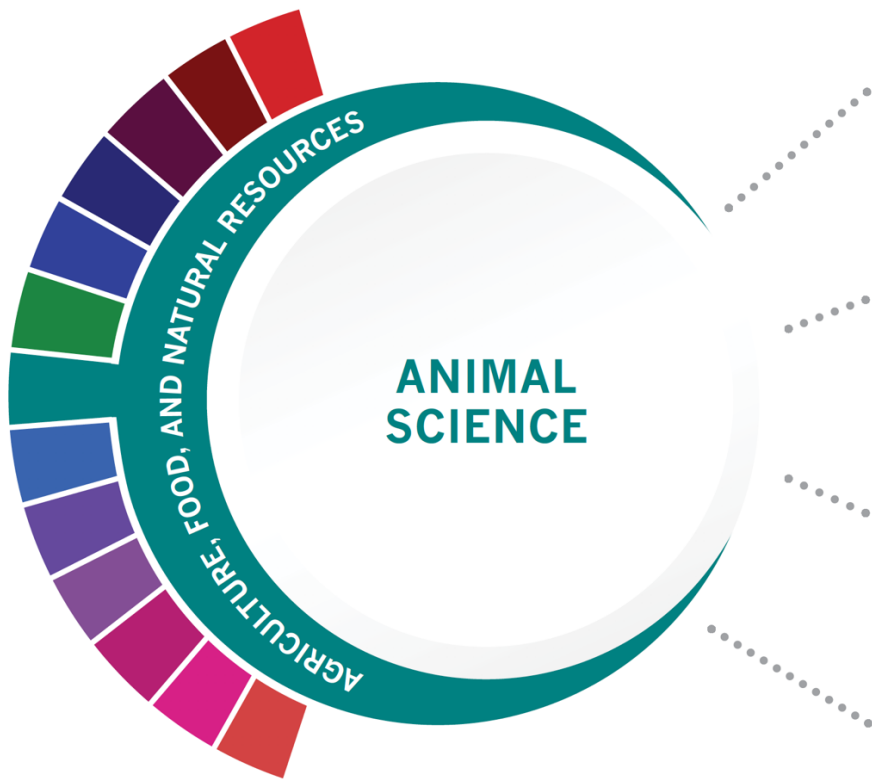
GR: 11-12 **CREDIT:** 2-3

Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job skills, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

5143 **CAREER PREPARATION II**

GR: 11-12 **CREDIT:** 2-3 **PREREQUISITE:** Career Preparation I

Career Prep II develops essential knowledge and skills through advanced classroom instruction with paid business and industry employment experiences. Career Preparation II maintains relevance and rigor, supports students attainment of academic standards, and effectively prepares students for college and career success.



Level 1 Principles of Agriculture, Food, and Natural Resources

Level 2 Small Animal Management
Equine Science

Level 3 Livestock Production/Lab
Veterinary Medical
Applications/Lab

Level 4 Advanced Animal Science
Practicum in Agriculture, Food, and Natural Resources
Scientific Research and Design

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|---|-----------------------|-------------------------------------|------------------------|---------------------------------------|
| Licensed Veterinary Technician | Pet Groomer | Food Science and Technology | Animal Sciences | Genetics |
| Feedyard Technician in Cattle Care and Handling | Veterinary Technician | Veterinary Studies | Agriculture | Veterinary Medicine |
| Certified Veterinary Assistant | Licensed Breeder | Biotechnology Laboratory Technician | Biology | Biological and Physical Sciences |
| | | Biology Technician | Zoology/Animal Biology | Biological and Biomedical Sciences |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

| Occupations | Median Wage | Annual Openings | % Growth |
|------------------------------------|-------------|-----------------|----------|
| Animal Breeders | \$39,135 | 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% |

LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|-------------------------|--|
| Texas FFA | Agri-Science Fair 4H Volunteer at a local farm or veterinary office FFA Supervised Agriculture Experience (SAE) |

WORK BASED LEARNING AND EXPANDED

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.

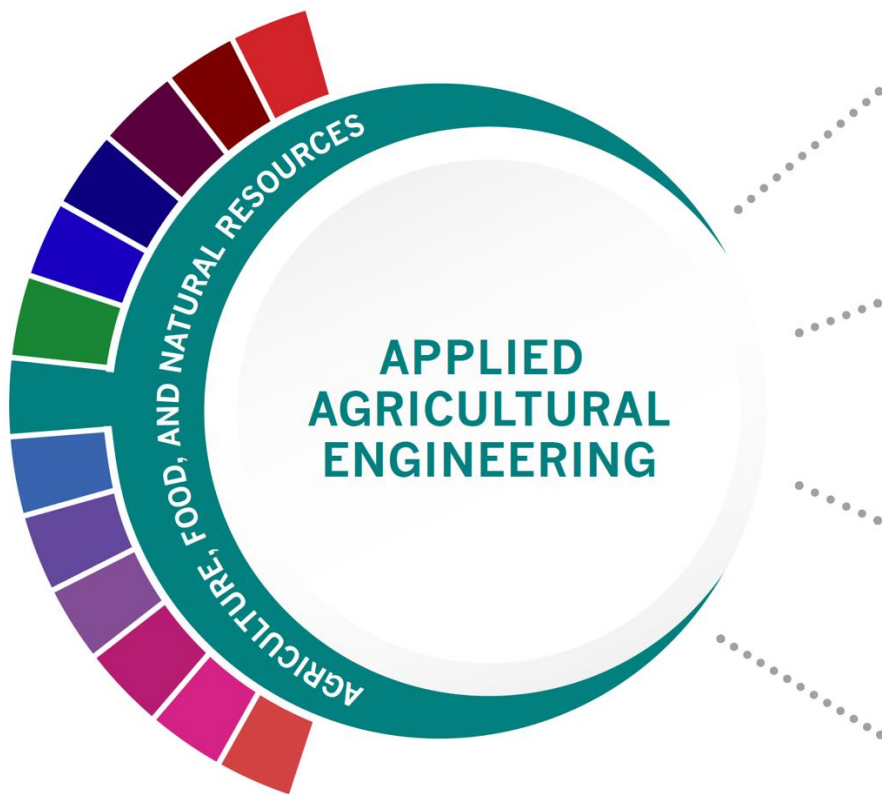
The land, and solar



Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life—food, water, 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, energy, and oil and gas production.

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 - July 2020





Level 1
CTE WELDING PROGRAM
 Principles of Agriculture, Food, and Natural Resources
 Agricultural Mechanics and Metal Technologies/Lab

Level 2
 Agricultural Structures Design and Fabrication/Lab
 =
 Intro to Welding

Level 3
 Agricultural Power Systems/Lab
 =
 Welding I

Level 4
 Agricultural Equipment Design and Fabrication/Lab
 =
 Welding II

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|---|---------------------------------------|---|-------------------------------------|---------------------------------------|
| OSHA 30 Hour General Industry | Certified Professional Agronomist | Heavy Equipment Maintenance Technology/Technician | Agricultural Engineering | Agricultural Engineering |
| Feedyard Technician in Machinery, Operation, Repair and Maintenance | Certified Reliability Engineer | Agricultural Mechanization, General | Agricultural Mechanization, General | Agricultural Mechanization, General |
| AWS SENSE Welding Level 1 | Certified Irrigation Designer | Small Engine Mechanics and Repair Technology/Technician | | |
| AWS D1.1 or D9.1 Certification | Fluid Power Mobile Hydraulic Mechanic | Welding Technology/Welder | | |

| Occupations | Median Wage | Annual Openings | % Growth |
|--|-------------|-----------------|----------|
| Outdoor Power Equipment and Other Small Engine Mechanics | \$32,406 | 366 | 16% |
| Welders | \$41,350 | 6,171 | 9% |
| Farm Equipment Mechanics and Service Technicians | \$39,915 | 304 | 17% |
| Mobile Heavy Equipment Mechanics | \$47,299 | 1,627 | 16% |
| Agricultural Engineers | \$64,792 | 9 | 13% |

LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|--|---|
| Tour a farm products or machinery plant Texas FFA | Earn a welding certification Intern at a farm products or machinery plant FFA Supervised Agriculture Experience (SAE) |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED

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.

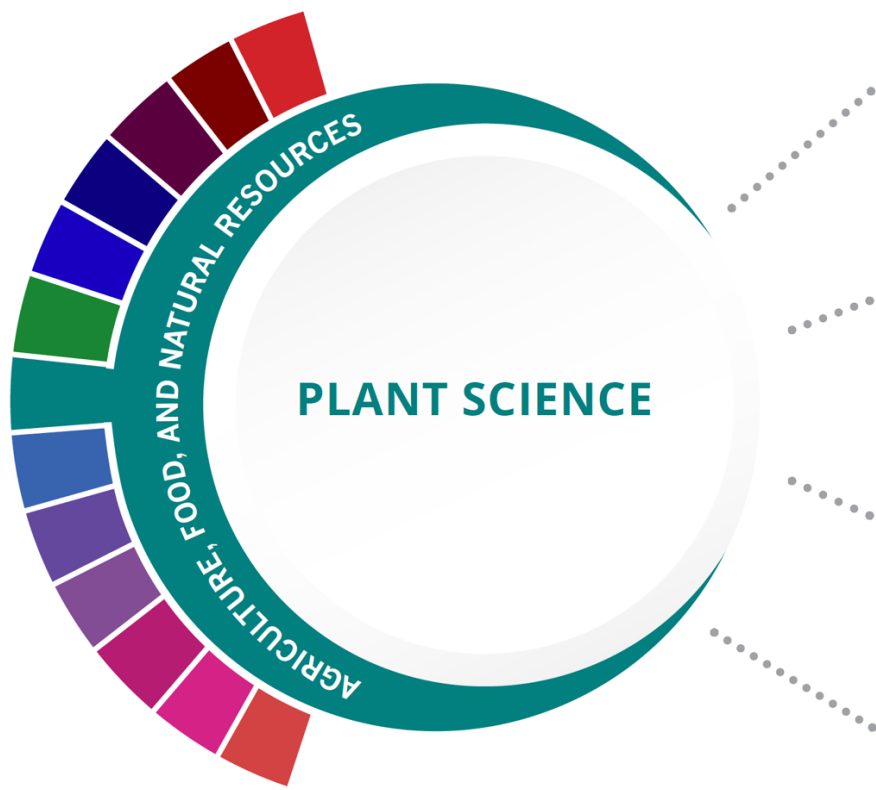
The land, and solar



Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life—food, water, 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, energy, and oil and gas production.

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 - July 2020





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

- Level 2** Landscape Design and Management (.5 credit)
Turf Grass Management (.5 credit)

- Level 3** Floral Design/Lab

- Level 4** Advanced Floral Design/Lab
Advanced Plant and Soil Science
Practicum in Agriculture, Food, and Natural Resources
Scientific Research and Design

| HIGH SCHOOL/ INDUSTRY CERTIFICATION | CERTIFICATE/ LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/ DOCTORAL PROFESSIONAL DEGREE |
|---|---|--|--|--|
| Landscape Irrigation Technician License | Pesticide Applicator | Applied Horticulture/ Horticulture Operations, General | Applied Horticulture/ Horticulture Operations, General | Applied Horticulture/ Horticulture Operations, General |
| Commercial/ Noncommercial Pesticide Applicator | Certified Floral Designer | Ornamental Horticulture | Agronomy and Crop Science | Agronomy and Crop Science |
| Texas State Floral Association Level One Floral Certification | Accredited Member of AIFD | Agricultural Business and Management, General | Agricultural Business and Management, General | Agricultural Business and Management, General |
| Texas State Floral Association Level Two Floral Certification | Landscape Industry Certified Technician | Turf and Turfgrass Management | Turf and Turfgrass Management | Farm/Farm and Ranch Management |

| 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% |

LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|-------------------------|--|
| Texas FFA | Work part-time at a florist; start or work for a local landscaping business FFA Supervised Agriculture Experience (SAE) |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED

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.

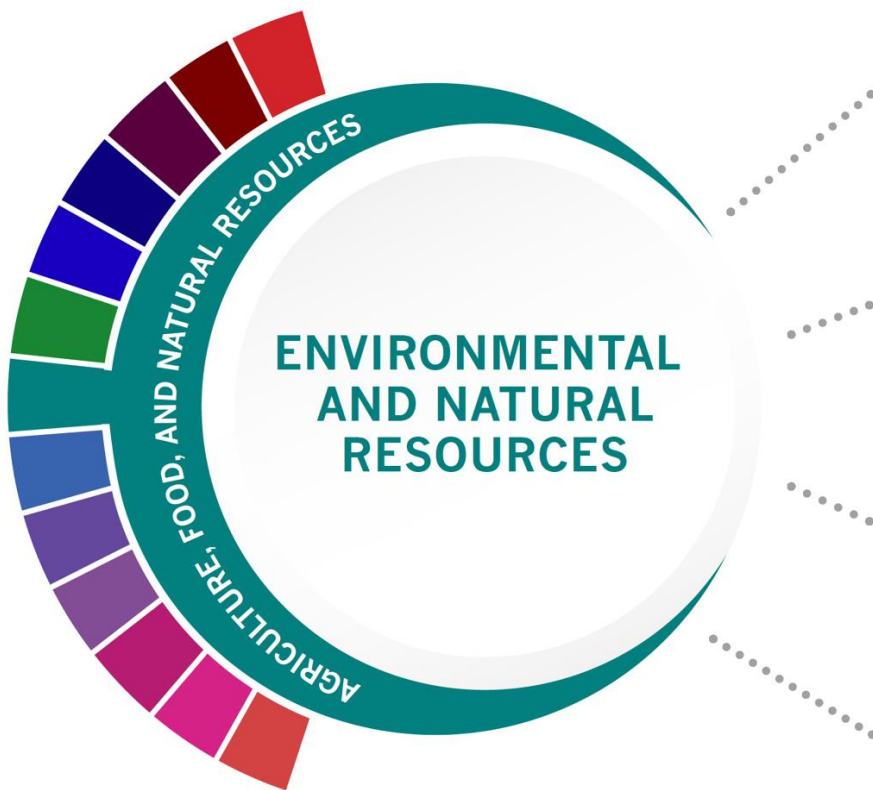
The land, and solar



Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life—food, water, 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, energy, and oil and gas production.

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 - July 2020





Level 1 Principles of Agriculture, Food, and Natural Resources

Level 2 Wildlife, Fisheries, and Ecology Management/Lab

Level 3 Range Ecology Management/Lab

Level 4 Practicum in Agriculture, Food, and Natural Resources

Scientific Research and Design

| HIGH SCHOOL/ INDUSTRY CERTIFICATION | CERTIFICATE/ LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/ DOCTORAL PROFESSIONAL DEGREE |
|--|---|--|---|--|
| Wastewater Collections, Class 1 | Board Certified Environmental Engineer - Hazardous Waste Management | Environmental Science | Environmental Science | Environmental Science |
| Water Operators, Class D | Certified Water Technologist | Environmental Studies | Environmental/ Environmental Health Engineering | Environmental/ Environmental Health Engineering |
| OSHA Hazardous Waste Operations and Emergency Response | Certified Environmental Scientist | Wildlife, Fish, and Woodlands Science and Management | Wildlife, Fish, and Woodlands Science and Management | Wildlife, Fish, and Woodlands Science and Management |
| | Certified in Public Health | Environmental Engineering Technology/ Environmental Technology | Natural Resources Law Enforcement and Protective Services | Fishing and Fisheries Science and Management |

| Occupations | Median Wage | Annual Openings | % Growth |
|--|-------------|-----------------|----------|
| Environmental Engineering Technicians | \$53,352 | 101 | 32% |
| Environmental Engineers | \$86,757 | 288 | 25% |
| Environmental Science and Protection Technicians, Including Health | \$40,268 | 508 | 17% |
| Environmental Scientists and Specialists, Including Health | \$77,896 | 644 | 24% |
| Zoologists and Wildlife Biologists | \$67,309 | 45 | 32% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|--|--|
| Attend summer leadership events Texas FFA | Intern at a waste treatment plant FFA Supervised Agriculture Experience (SAE) |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

The Environmental and Natural Resources program of study explores the occupations and educational opportunities associated with the research, design, and planning of engineering or technical duties in the prevention and control of environmental hazards. This program of study may also include exploration into conducting research for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population.

The land, and solar



Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life—food, water, 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, energy, and oil and gas production.

Successful completion of the Environmental and Natural Resources program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020



Agriculture, Food & Natural Resources

Student course selections will determine course availability for each school year.

5141 ADVANCED ANIMAL SCIENCE

PREREQUISITE: Biology, Chemistry, Physics, IPC, Small Animal/Equine or Livestock Production

GR. 11-12 CREDIT: 1

Curriculum in this course examines the interrelatedness of human, scientific and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences. Topics to be covered include, but are not limited to, principles relating to human, scientific and technological dimensions of scientific animal agriculture, principles of reproduction and breeding as related to livestock improvement. Examine and compare animal anatomy and physiology in livestock. THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.

5118 Agricultural Mechanics and Metal Tech

GR. 9-12 CREDIT: 1

REQUIRED FOR (INTRO to WELDING)

This course 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.

5541 SCIENTIFIC RESEARCH & DESIGN IN AGRICULTURE

PREREQUISITE: Biology, Chemistry, Physics, or IPC

GR. 11-12 CREDIT: 1

A laboratory-oriented course designed to take an in-depth look at the scientific production of agricultural products. This course will emphasize the importance of agricultural production to the Texas, U.S., and the world economy. This course will explore farm and ranch development, soil and water conservation, beef cattle production, horse production, animal health, range management, wildlife management, forestry management, water and pond management, aquaculture, sheep and goat management, forage production, animal nutrition, marketing, financing and record keeping, crop production, horticulture production, mechanized agriculture, and urban agriculture products. THIS CLASS WILL COUNT AS A 4TH YEAR SCIENCE.

5126 EQUINE SCIENCE

GR. 10-12 CREDIT: .5

To be prepared for careers in the field of animal science, students need to 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. Suggested animals included in the course of study include, but are not limited to, horses, donkeys, and mules.

5124 LIVESTOCK PRODUCTION

GR. 10-12 CREDIT: 1

Students will be prepared to careers in the field of animal science. Students need to attain academic knowledge and skills, acquire knowledge and skills related to animal systems in the work place, and develop knowledge and skills related to animal systems in the work place, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

5110 PRINCIPLES OF AFNR

GR. 9-12 CREDIT: 1

This course is designed to introduce beginning students in agricultural science to global agriculture. The course includes career development, leadership, communications, plant and animal science concepts and mechanical systems. It also includes environment, personal finance, supervised agricultural experience programs, careers and entrepreneurship.

5130 FLORAL DESIGN

GR. 10-12 CREDIT: 1

This course is designed to prepare students for a career in Floral Design. Students will develop the ability to identify and demonstrate the principles and techniques related to floral designs as well as develop an understanding of the management of floral enterprises. Topics to be covered include but are not limited to design principles and techniques in floral art.



5125 SMALL ANIMAL MANAGEMENT

GR. 10-12 CREDIT: .5

This course is designed to prepare a student for a career in animal science. The student will develop knowledge and skills regarding career opportunities, entry requirements and industry expectations. The student will describe the importance of small animal ownership, learn the hazards associated with working in the small animal industry, and evaluate current topics in animal rights and animal welfare. The student will also study the care and management requirements for a variety of small animals.

5128 LANDSCAPE DESIGN AND MANAGEMENT

GR. 10-12 CREDIT: .5

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.

6208 Turf Grass Management

GR. 10-12 CREDIT: .5

Turf Grass Management is designed to develop an understanding of turf grass management techniques and practices.



5142 Advanced Plant and Soil Science

GR. 11-12 CREDIT: 1

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. THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.



5132 VETERINARY MEDICAL APPLICATIONS

PREREQUISITE: Small Animal/Equine or Livestock Production
GR. 11-12 CREDIT: 1

This course is designed to prepare students for a career in animal science. Topics to be covered include but are not limited to veterinary practices as they relate to both large and small animal species. Research current topics in veterinary medicine, discuss professional ethics and laws that relate to veterinary medicine. Evaluate veterinary hospital management and marketing. Study medical terminology and evaluate veterinary terms. Explore animal management, investigate the body systems and gain knowledge of each systems purpose and function. The students will perform math calculations used in veterinary medicine, evaluate animal diseases and identify internal and external parasites. Other topics such as nutrition, imaging equipment and hospital procedures etc. will be covered. **STUDENTS ENROLLED IN THIS COURSE WILL HAVE THE OPTION OF OBTAINING CLASS HOURS AND VETERINARY OBSERVATION (CLINICAL) HOURS NECESSARY TO COMPLETE THE VETERINARY ASSISTANT CERTIFICATION.**

5129 WILDLIFE, FISHERIES & ECOLOGY MANAGEMENT

GR. 10-12 CREDIT: 1

This class is designed to prepare students for careers in natural resource systems. Students can 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 needs opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course examines the management of game and non-game wildlife species, fish, and aqua-crops and their ecological needs as related to current agricultural practices. Hunter Education, Boater Education and Angler Education certifications can be obtained.

5131 ADVANCED FLORAL DESIGN

PREQUISITE: Floral Design
GR. 11-12 CREDIT: 1

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.

5144 RANGE ECOLOGY MANAGEMENT COURSE

GR. 11-12 CREDIT: 1

Range Ecology and Management (Wildlife 2) will develop and understanding of range land ecosystems and sustainable forage production. In this class students will explore range land management and how we can manage our range lands to benefit both wildlife and livestock. Students will evaluate soils, range plants and animals, riparian zones, and various range land ecosystems across Texas and the Southern United States.

5135 PRACTICUM IN AG, FOOD, NATURAL RESOURCES

GR: 11-12 CREDIT: 2

Agriculture, Food, and Natural Resources Career Cluster. Practicum in Agriculture, Food, and Natural Resources is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. 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 Agriculture, Food, and Natural Resources Career Cluster.

5145 SCIENTIFIC RESEARCH & DESIGN (Wildlife II)

PREREQUISITE: Biology, Chemistry, Physics, or IPC
GR. 11-12 CREDIT: 1

This course will explore farm and ranch development, soil and water conservation, beef cattle production, horse production, animal health, range management, wildlife management, forestry management, water and pond management, aquaculture, sheep and goat management, forage production, animal nutrition, marketing, financing and record keeping, crop production, horticulture production, mechanized agriculture, and urban agriculture products. **WILL COUNT AS 4th YR. SCIENCE**

CTE WELDING PROGRAM

5134 AGRICULTURAL STRUCTURES DESIGN AND FAB (INTRO TO WELDING)

PREQUISITE: Agricultural Mechanics and/or Principles of Ag
GR. 10-12 CREDIT: 1

This course is for students who are interested in learning how to build structures as well as basic home maintenance skills. Students will learn basic woodworking and metal fabrication. Students may build storage sheds, ag equipment etc.

5122 AGRICULTURAL POWER SYSTEMS/LAB (WELDING I)

PREQUISITE: AG Structures and Design
GR. 11-12 CREDIT: 2

Agricultural Power Systems is designed to develop an understanding of power and control systems as related to energy sources, small and large power systems, and agricultural machinery. To prepare for careers in agricultural power, structural, and technical systems, students must attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.

5117 AGRICULTURE EQUIPMENT DESIGN AND FAB/LAB (WELDING II)

PREQUISITE: AGRICULTURAL POWER SYSTEMS/LAB
GR. 11-12 CREDIT: 2

In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment.



Principles of Construction

Level 1

Level 2 Construction Management I

Level 3 Construction Management II

Level 4 Practicum in Construction Management

Career Preparation I

| HIGH SCHOOL/ INDUSTRY CERTIFICATION | CERTIFICATE / LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/ DOCTORAL PROFESSIONAL DEGREE |
|---|---|---|---|---|
| NCCER Construction Technology | Code Enforcement Officer, Texas Department of Health Code Enforcement | Construction Engineering Technology/ Technician | Construction Engineering Technology/ Technician | Materials Engineering |
| NCCER Core Curriculum | Certified Cost Estimator/ Analyst | Business Administration and Management, General | Business Administration and Management, General | Business Administration and Management, General |
| OSHA 30 Hour Construction | Certified Professional Estimator | Mechanical Engineering | Mechanical Engineering | Mechanical Engineering |
| NCCER Construction Site Safety Technician | Structural Masonry Special Inspector | Business/ Commerce, General | Business/ Commerce, General | Manufacturing Engineering |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

| Occupations | Median Wage | Annual Openings | % Growth |
|--------------------------------------|-------------|-----------------|----------|
| Construction and Building Inspectors | \$53,914 | 983 | 17% |
| Cost Estimators | \$63,939 | 2,239 | 21% |
| Construction Managers | \$87,402 | 2,401 | 14% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|---|---|
| Shadow a building inspector or cost estimator SkillsUSA | Intern with a construction company shadowing project managers or inspectors |

The Building Codes and Inspection program of study explores the occupations and educational opportunities associated with cost estimates for construction projects or services to aid management in bidding on or determining the price of products or services. This program of study may also include exploration into inspecting structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations.

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

Successful completion of the Construction Management's and Inspection program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020



Construction Management and Inspection

Student course selections will determine course availability for each school year.

5710 PRINCIPLES OF CONSTRUCTION

GR. 9-12 CREDIT: 1

This course provides an overview to the various fields of architecture, interior design, construction science, and construction technology. Achieving proficiency in decision-making and problem solving is an essential skill for career planning and life-long learning. Students use self-knowledge, educational, and career information to set and achieve realistic career and educational goals. Job-specific, skilled training can be provided through the use of training modules to identify career goals in trade and industry areas. Safety and career opportunities are included, in addition to work ethics and job-related study in the classroom such as communications; problem solving and critical thinking; Information Technology Applications; systems; safety, health, and environmental; leadership and teamwork; ethics and legal responsibilities; employability and career development; technical skills; introduction to hand tools; introduction to power tools; basic rigging; and reading technical drawings.

5721 CONSTRUCTION MANAGEMENT I

GR. 10-12 CREDIT: 2

In Construction Technology, students gain knowledge and skills specific to those needed to enter the work force as carpenters or building maintenance supervisors or prepare for a post-secondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, tool usage, building materials, codes, and framing. Curriculum can include the OSHA 10 hour Safety Certification.

5731 CONSTRUCTION MANAGEMENT II

PREREQUISITE: Construction Management I

GR. 11-12 CREDIT: 2

In Advanced Construction Technology, students receive extensive training extending the skills taught in construction technology. Students gain knowledge and skills specific to those needed to enter the work force as carpenters or building maintenance supervisors or prepare for a post-secondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, tool usage, building materials, codes, and framing. Curriculum can include the OSHA 10 hour Safety Certification.

5741 Practicum in Construction Management (1st time taking)

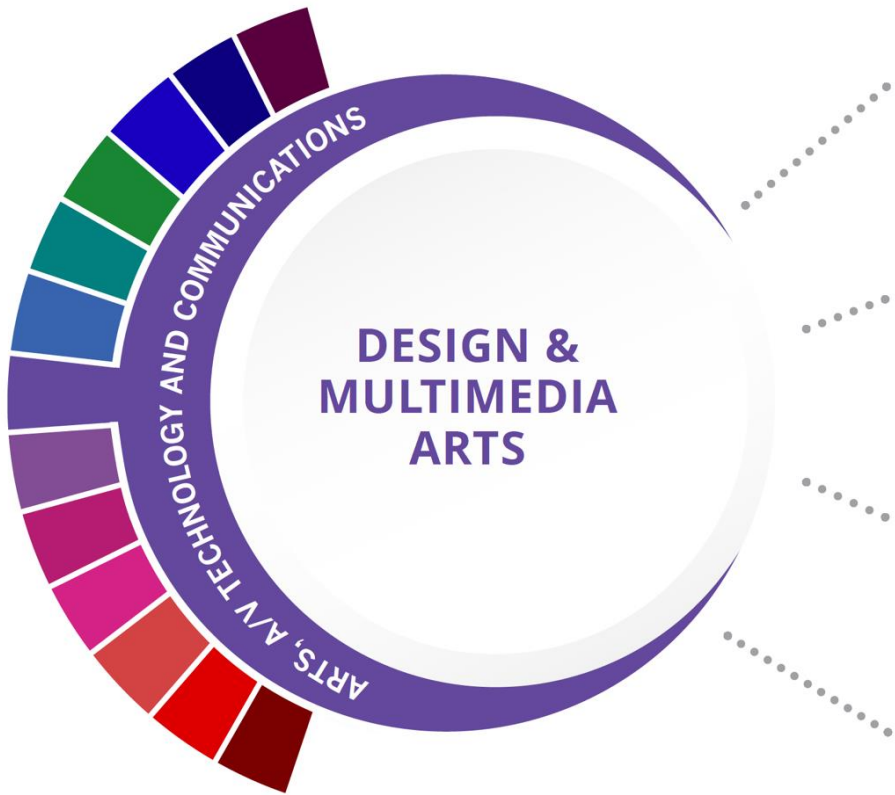
5742 Practicum in Construction Management (2nd time taking)

PREREQUISITE: Construction Management II.

GR: 12 Credit: 2-3

Practicum in Construction Management is an occupationally specific course designed to provide classroom technical instruction or on-the-job training experiences. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom.





| | |
|----------------|--|
| Level 1 | Graphic Design & Illustration I/Lab |
| | Commercial Photography I/Lab |
| | Fashion Design I |
| Level 2 | Commercial Photography II/Lab |
| | Digital Media |
| | Fashion Design I/Lab |
| Level 3 | Graphic Design & Illustration II/Lab |
| | Digital Design and Media Production |
| | Practicum Commercial Photography (1 st time taking) |
| | Fashion Design II/Lab |
| Level 4 | Practicum in Graphic Design & Illustration (1 nd time taking) |
| | Practicum in Graphic Design & Illustration (2 nd time taking) |
| | Practicum Commercial Photography (2 nd time taking) |
| | Career Preparation I/II |


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

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

| WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES | |
|---|---|
| Exploration Activities: | 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. |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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

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

Successful completion of the Design & Multimedia Arts program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020



Design & Multimedia Arts

Student course selections will determine course availability for each school year.

5630 GRAPHIC DESIGN & ILLUSTRATION

GR. 9-12 CREDIT: 1

Students will be expected to develop an understanding of the graphic design industry with a focus on fundamental elements and principles of visual art and design. This course provides training in fundamental use of digital layout programs. Students explore basic graphic design techniques to design and develop layouts and compositions for products and businesses.

5632 GRAPHIC DESIGN & ILLUSTRATION II

PREREQUISITE: Graphic Design & Illustration

GR. 10-12 CREDIT: 2

Careers in graphic design span all aspects of the advertising and visual communications industry. Students will gain advanced knowledge of the Newspaper/Journalism industry and develop advanced skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster.

5633 Practicum in Graphic Design and Illustration (1st time taking)

GR. 11 CREDIT: 2

5634 Practicum in Graphic Design and Illustration (2nd time taking)

GR. 12 CREDIT: 2

PREREQUISITE: Graphic Design & Illustration II

Students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

5133 CAREER PREPARATION I

5143 CAREER PREPARATION II

GR. 11-12 CREDIT: 2-3

Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders.

5650 COMMERCIAL PHOTOGRAPHY I

GR. 9-12 CREDIT: 1

This is a basic level photography course, where students will learn how to use a camera, how to take quality photos and how to use Adobe Photoshop software. No previous camera or photography experience is necessary for this course.

5651 COMMERCIAL PHOTOGRAPHY II

GR. 10-12 CREDIT: 1

Students in this advanced photography course will explore more advanced photo techniques, will have the opportunity to enter photo contests and create a portfolio for possible AP College Board credit. The prerequisite for this course is Commercial Photography 1. Students do not need their own camera for this course, but it is helpful, as cameras available for student checkout are limited in number.

5652 PRACTICUM IN COMMERCIAL PHOTOGRAPHY (1st time taking)

5653 PRACTICUM IN COMMERCIAL PHOTOGRAPHY (2nd-time taking)

GR. 12 CREDIT: 2

This is a study of the elements and process of book production with emphasis on the high school yearbook. Students will learn format, organization, layout techniques, copy writing, selection of material such as pictures and artwork, and eventually produce the yearbook. Students will learn advertising principles and financial management.

5620 Fashion Design I

GR. 9-12 CREDIT: 1

Students will be expected to develop an understanding of the fashion industry with an emphasis on design and construction.

5622 FASHION DESIGN I/LAB

PREREQUISITE: Graphic Design & Illustration

GR. 10-12 CREDIT: 2

This laboratory course is designed to address the textiles and apparel industries, textile design and production, apparel design practices and influences, and career preparation.

5623 Fashion Design II/Lab

PREREQUISITE: Fashion Design I.

GR. 11-12 CREDIT: 2

Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the fashion industry with an emphasis on design and construction.

5627 DIGITAL MEDIA

PREREQUISITE: Graphic Design I or Commercial Photo I

GR. 10-12 CREDIT: 1

In Digital Media, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment.

5628 DIGITAL DESIGN & MEDIA PRODUCTION

PREREQUISITE: Digital Media

GR. 11-12 CREDIT: 1

Students will build on experience from Digital Media to 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.



Level 1 Human Resources Management (.5 credit) @ BJHS

Level 2 Virtual Business (1 semester) (.5 credit)
Global Business (1 semester) (.5 credit)

Level 3 Practicum in Business Management

Level 4 Career Preparation I

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


| Occupations | Median Wage | Annual Openings | % Growth |
|---|-------------|-----------------|----------|
| Administrative Service Managers | \$96,138 | 2,277 | 21% |
| Management Analysts | \$87,651 | 4,706 | 32% |
| General and Operations Managers | \$107,640 | 18,679 | 20% |
| Operations Research Analysts | \$78,083 | 1,128 | 38% |
| Supervisors of Administrative Support Workers | \$57,616 | 14,982 | 20% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|---|---|
| Business Professional of America (BPA), Future Business Leaders of America (FBLA), and DECA | Internship with local business or chamber of commerce |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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

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

Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020





Level 1 Money Matters

Accounting I

Level 2 Financial Mathematics

Accounting II

Level 3

Career Preparation I

Level 4

| HIGH SCHOOL/ INDUSTRY CERTIFICATION | CERTIFICATE/ LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/ DOCTORAL PROFESSIONAL DEGREE |
|---|---------------------------------|----------------------------------|----------------------------------|--|
| QuickBooks Certified User | Certified Management Accountant | Real Estate | Accounting | Financial Accounting |
| Microsoft Office Specialist or Expert - Excel | Certified Internal Auditor | Financial, General | Financial, General | Business Administration |
| Certified Insurance Service Representative | Certified Income Specialist | Financial Planning and Services] | Financial Planning and Services] | Financial Planning |
| | Certified Public Accountant | Certified Income Specialist | Certified Income Specialist | |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

| 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% |

LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|--|---|
| Business Professionals of America (BPA) Future Business Leaders of America (FBLA) DECA | Internship with local accounting firm Microsoft Office Specialist (MOS) certifications |

WORK BASED LEARNING AND EXPANDED

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.

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



Successful completion of the Accounting & Financial Services program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020



Business Management & Administration

Student course selections will determine course availability for each school year.

5236 FINANCIAL MATHEMATICS

PREREQUISITE: Algebra I

GR. 10-12 CREDIT: 1

A course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors.

Counts for 4th Math credit for FOUNDATION DEGREE PLAN.

5223 Global Business

GR. 10-12 CREDIT: .5

Global Business is designed for students to analyze global trade theories, international monetary systems, trade policies, politics, and laws relating to global business as well as cultural issues, logistics, and international human resource management.

This course should be taken with Virtual Business. This course will fulfill the technology credit when taken with Virtual Business.

5637 VIRTUAL BUSINESS

GR. 10-12 CREDIT: .5

If you love to shop this business class teaches you the business basics and exposes the secrets of retailing. Students learn the tough business decisions that impact their common shopping experiences - why stores are located where they are, how stores decide to price products, etc. Retailing, students start with a familiar grocery/convenience store. As their retail knowledge deepens, students later manage sporting goods and electronics retailers. **This course should be taken with Global Business this course will fulfill the technology credit when taken with Global Business.**

5133 CAREER PREPARATION I

GR. 11-12 CREDIT: 2-3

Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job skills, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development.

5237 Practicum in Business Management

GR: 11-12 Credits: 2-3

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.

5213 Money Matters

GR. 9-12 CREDIT: 1

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.

5220 Accounting I

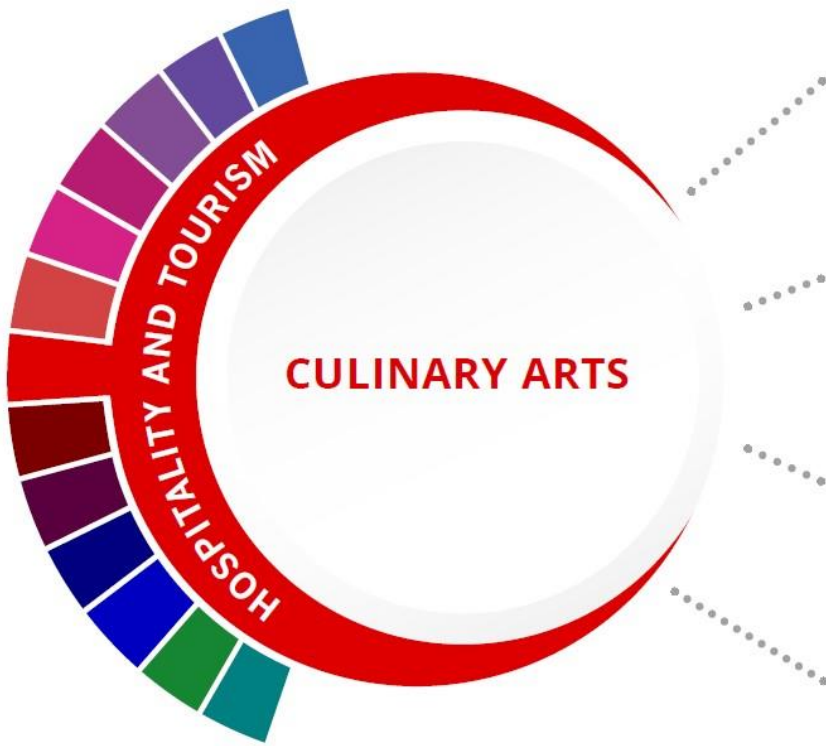
GR. 10-12 Credit: 1

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

5260 Accounting II

GR. 11-12 Credit: 1 **PREQ:** Accounting I

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 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.



Level 1 Introduction to Culinary Arts

Level 2 Culinary Arts

Level 3 Advanced Culinary Arts

Level 4 Food Science
Practicum in Culinary Arts
Career Preparation I

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

| 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% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|---|---|
| Family, Career, and Community Leaders of America (FCCLA), SkillsUSA, American Culinary Federation, Texas Restaurant Association | Plan a catering event or work for a catering company; participate in a cooking course; work in a restaurant; cook at home |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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.



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

Successful completion of the Culinary Arts program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020



COURSE INFORMATION

5419 INTRODUCTION TO CULINARY ARTS

GR. 9-12 CREDIT: 1

The food service industry is all about people - the people it serves and the people it employs. Food service continues to change, grow, and expand to meet the ever-changing needs of its customers. This growth creates exciting job opportunities. Before starting on your career path, explore the variety of job opportunities available in the food service industry. Culinary Arts introduces the fundamentals and principles of the art of cooking and the science of baking, including management and production skills and techniques. Servsafe Foodhandler certification can be obtained, recognized by Texas Department of State Health Services.

5429 CULINARY ARTS

Prerequisite: Introduction to Culinary Arts

GR. 10-12 CREDIT: 2

The food service industry is all about people - the people it serves and the people it employs. Food service continues to change, grow, and expand to meet the ever-changing needs of its customers. This growth creates exciting job opportunities. Before starting on your career path, explore the variety of job opportunities available in the food service industry. Culinary Arts introduces the fundamentals and principles of the art of cooking and the science of baking, including management and production skills and techniques. Servsafe Foodhandler certification can be obtained, recognized by Texas Department of State Health Services.

5431 FOOD SCIENCE

PREREQUISITE: 3 units of science, including Biology and Chemistry

GR. 11-12 CREDIT: 1

In food science, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Food science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. **THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.**

5428 PRACTICUM IN CULINARY ARTS

PREREQUISITE: Culinary Arts I

GR. 11-12 CREDIT: 2

This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Students are taught employability skills, which include job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Practicum in culinary arts is relevant and rigorous, supports student application of academic standards, and effectively prepares students for more advanced training opportunities in the culinary arts career area.

5418 Advanced Culinary Arts

GR: 11-12 CREDIT: 2

PREREQUISITE: Intro to Culinary Arts

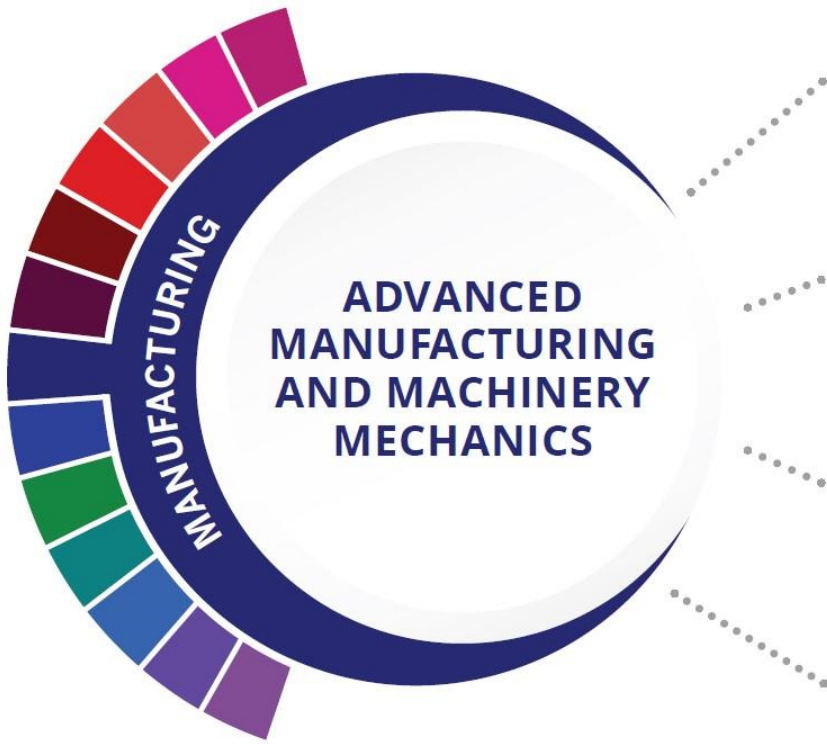
Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards to prepare students for success in higher education, certifications, and/or immediate employment

5133 CAREER PREPARATION I

GR. 11-12 CREDIT: 2-3

Career Preparation I provides opportunities for students to participate in a work- based learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job skills, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.





Level 1 Principles of Applied Engineering @ BJHS

Level 2 Robotics I

Level 3 Robotics II

Level 4 Practicum in Manufacturing
Career Preparation I

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|---|--------------------------------|---|------------------------|---------------------------------------|
| FANUC Robot Operator 1 | Engineer, Professional | Electro-mechanical Engineering/Technology | Electrical Engineering | Electrical Engineering |
| Mastercam Associate Level Certification | Certified Quality Technician | Certified Quality Technician | Industrial Engineering | Industrial Engineering |
| NCCER Industrial Maintenance Mechanic | Plant Maintenance Technologist | Industrial Mechanics and Maintenance Technology | Mechanical Engineering | Mechanical Engineering |
| NIMS Industrial Technology Maintenance - Maintenance Operations | | | | |

| 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% |

| WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES | |
|---|--|
| Exploration Activities: | Work Based Learning Activities: |
| Participate in SkillsUSA and local STEM events | Apprenticeship at a local business or industry American Welding Society |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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.



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.

Successful completion of the Advanced Manufacturing and Machinery program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised - July 2020



Manufacturing

Student course selections will determine course availability for each school year.

ROBOTICS I

GR. 9-12 CREDIT: 1 COURSE: 5531

Students enrolled in this course will demonstrate knowledge and skills necessary for the robotics and automation industry. Through implementation of the design process, students will transfer advanced academic skills to component design 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 robotics and automation industry.

5532 Robotics II

GR. 10-12 CREDIT: 1

Prerequisite: Robotics I.

In 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. Note: This course satisfies a math credit requirement for students on the Foundation High School Program.

5133 CAREER PREPARATION I

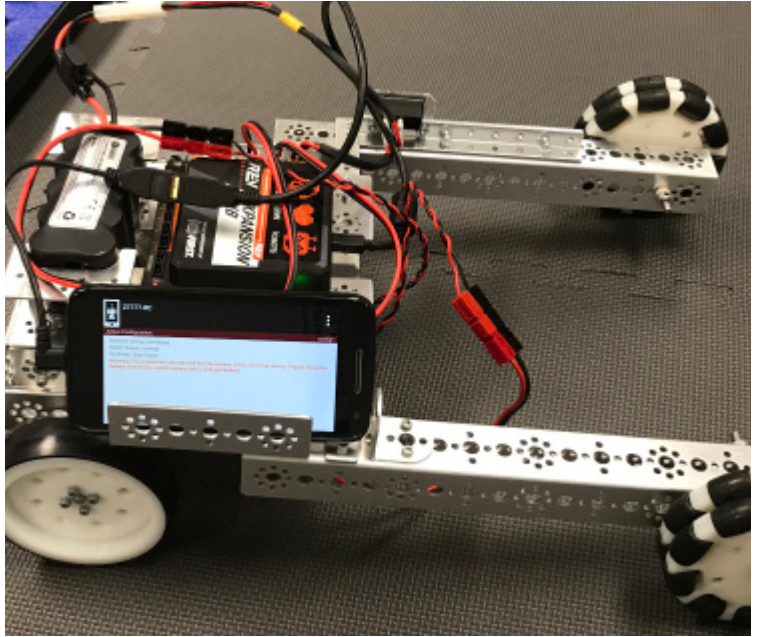
GR. 11-12 CREDIT: 2-3

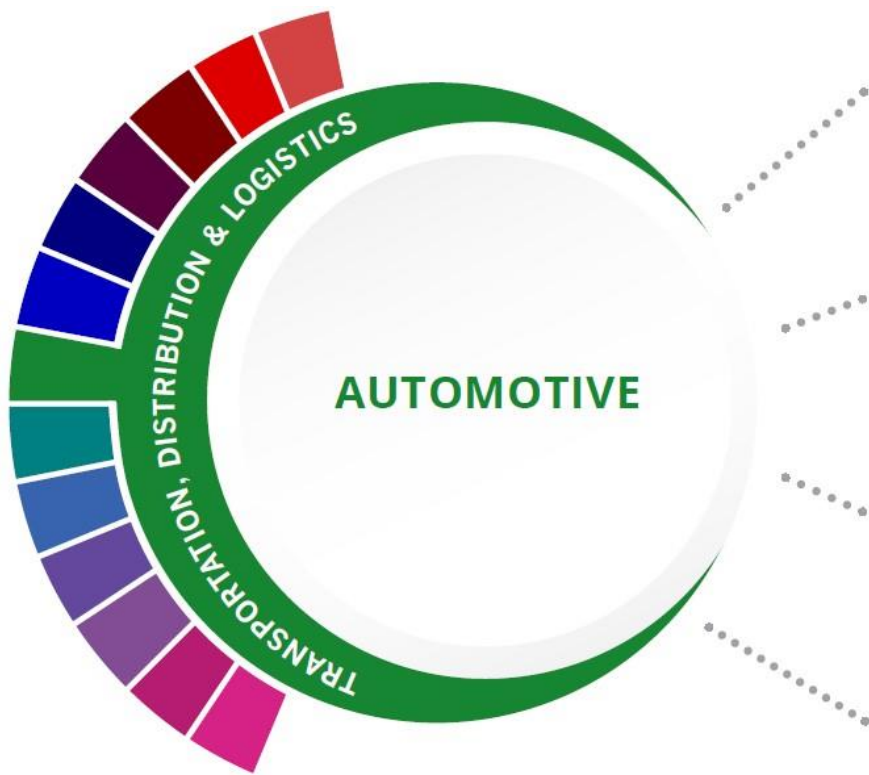
Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job skills, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

5025 PRACTICUM IN MANUFACTURING

GR: 12 CREDIT: 2

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





Level 1 Automotive Basics

Level 2 Automotive Technology I

Level 3 Automotive Technology II/Lab

Level 4 Practicum in Transportation Systems
Career Preparation I

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

| Occupations | Median Wage | Annual Openings | % Growth |
|---|-------------|-----------------|----------|
| Automotive Body and Related Repairers | \$40,144 | 1,456 | 25% |
| Automotive Service Technician and Mechanics | \$38,459 | 5,557 | 18% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|---|---|
| SkillsUSA competition Automotive Service Association | Work at a local automotive repair or body shop. |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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



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

Successful completion of the Automotive program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020



Transportation, Distribution & Logistics

Student course selections will determine course availability for each school year.

5910 AUTOMOTIVE BASICS

GR. 9-12 CREDIT: 1

In this course, students gain knowledge and skills in the safe applications, design, production and assessment of products, services and systems. This includes the history, laws and regulations, and common practices used in the logistics industries through a variety of interesting and relevant, problem solving activities.

5920 AUTOMOTIVE TECHNOLOGY I

GR. 10-12 CREDIT: 2

Pre-employment laboratory course with job specific training for entry level employment. Includes use of repair manuals, service and repair of basic components of auto, fuel systems, engine, emission control, power trains, chassis, electrical, brakes, heating and air conditioning. Instruction includes entrepreneurship, safety, leadership training and career opportunities. NOTE: This can lead to industry-validated credentials, the OSHA Certifications.

5930 AUTOMOTIVE TECHNOLOGY II

PREREQUISITE: Automotive Technology

GR. 11-12 CREDIT: 2

A pre-employment laboratory course designed to provide job specific training for entry-level employment in the automotive career field. Advanced Automotive Technology is an advanced class stressing more hands on training. Instruction emphasizes use of repair manuals, service and repair of basic automobile components: fuel systems, engine, emission control, power trains, chassis, electrical, brakes, heating and air conditioning. Instruction includes entrepreneurship, safety, leadership training and career opportunities. NOTE: This course can lead to industry-validated credentials, the OSHA Certification.

5133 CAREER PREPARATION I

GR. 11-12 CREDIT: 2-3

Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job skills, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

5143 CAREER PREPARATION II

PREREQUISITE: Career Preparation I

GR. 11-12 CREDIT: 2-3

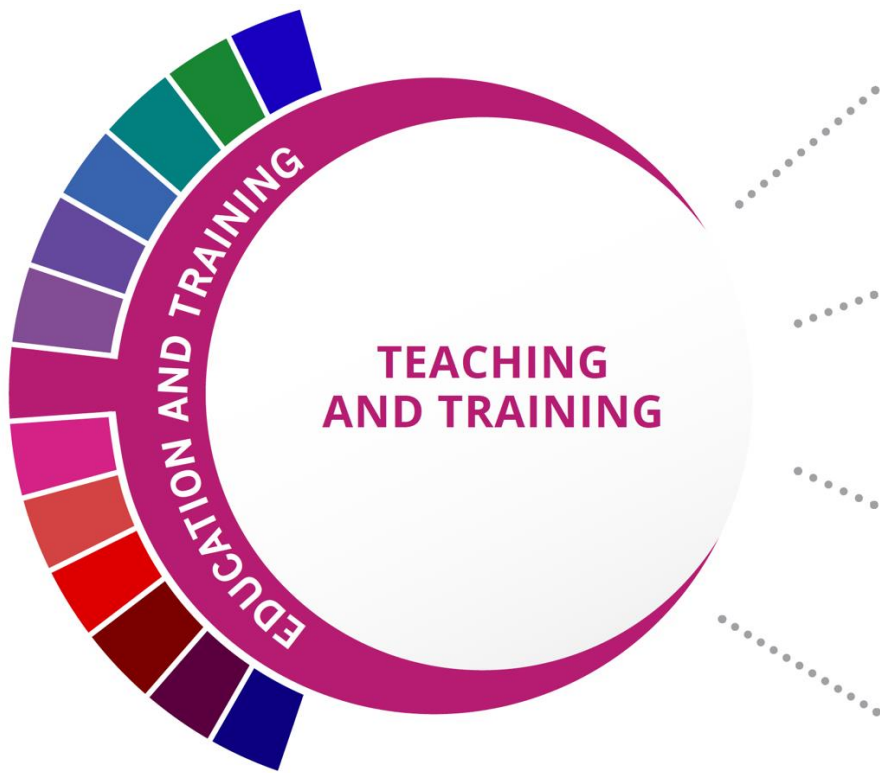
Career Prep II develops essential knowledge and skills through advanced classroom instruction with paid business and industry employment experiences. Career Preparation II maintains relevance and rigor, supports students attainment of academic standards, and effectively prepares students for college and career success

8329 PRACTICUM IN TRANSPORTATION SYSTEM

GR: 11-12 CREDIT: 2

Practicum in Transportation Systems 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 experience such as internships, mentorships, independent study, or laboratories. The Practicum can be either school lab based or worked based.





Level 1 Principles of Education and Training

Level 2 Child Development

Level 3 Instructional Practices (CARS I) (2hr)

Level 4 Practicum in Education and Training (CARS II) (2hr)

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

| 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% |

| Exploration Activities: | Work Based Learning Activities: |
|---|--|
| 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. |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

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.



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

Successful completion of the Teaching and Training program of study will fulfill requirements of the Public Service Endorsement. Revised - July 2020



Education & Training

Student course selections will determine course availability for each school year.

5434 Instructional Practices (CARS I) (2 HR)

GR. 11-12 CREDIT: 2

Students enrolled as student mentors will participate in the CARS (Children Are Really Special) program at the elementary schools. CARS learning addresses the needs of every student in learning reading and math in one-on-one mentoring sessions.

6255 PRINCIPLES OF EDUCATION AND TRAINING

GR. 9-10 CREDIT: 1

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

5422 CHILD DEVELOPMENT

GR. 10-12 CREDIT: 1

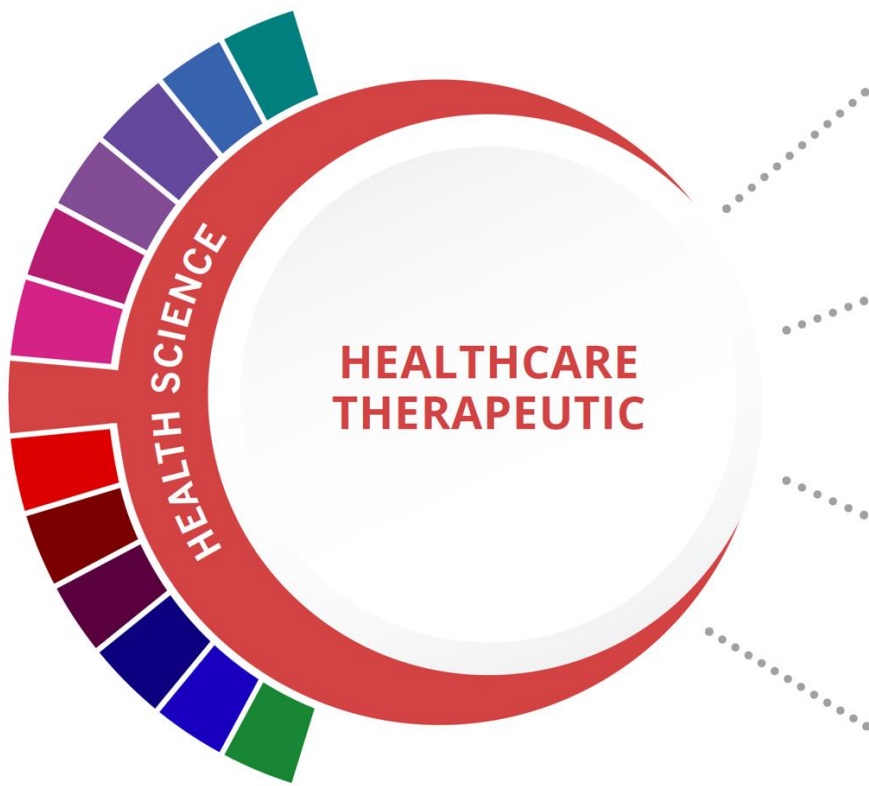
This technical laboratory course addresses knowledge and skills related to child growth and development from pre-natal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate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

5432 PRACTICUM IN EDUCATION AND TRAINING (CARS II) (2HR)

GR.12 CREDIT: 2

Students enrolled as student mentors will participate in the CARS (Children Are Really Special) program at the elementary schools. CARS learning addresses the needs of every student in learning reading and math in one-on-one mentoring sessions





- Level 1** Medical Terminology

- Level 2** Health Science Theory

- Level 3** Anatomy and Physiology
Pathophysiology

- Level 4** Practicum in Health Science (CMA)

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|------------------------------------|-----------------------|----------------------------|-------------------|---------------------------------------|
| Registered Dental Assistant | Dental Assistant | Dental Hygienist | Dental Hygienist | Dentist |
| Certified Patient Care Technician | Surgical Technologist | Medical/Clinical Assistant | | Physician Assistant |
| Certified Nurse Aide/Assistant | Medical Assistant | | | Family and General Practitioners |
| Pharmacy Technician | Pharmacy Aides | | | Pharmacist |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

| Occupations | Median Wage | Annual Openings | % Growth |
|-------------------------|-------------|-----------------|----------|
| Medical Assistants | \$29,598 | 8,862 | 30% |
| Surgical Technologists | \$45,032 | 1,150 | 20% |
| Dental Hygienists | \$73,507 | 1,353 | 38% |
| Physicians and Surgeons | \$213,071 | 1,151 | 30% |
| Dental Assistants | \$34,840 | 4,422 | 31% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|---|---|
| SkillsUSA Health Occupation Students of America (HOSA) | Volunteer at a community wellness center, hospital, assisted living, or nursing home. |

The Healthcare Therapeutic program of study introduces students to occupations and educational opportunities related to diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study also includes an introduction to the opportunities associated with providing treatment and counsel to patients as well as rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

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

Successful completion of the Healthcare Therapeutic program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020





Level 1 Principles of Exercise Science and Wellness

Level 2 Kinesiology I

Level 3 Anatomy and Physiology

Level 4 Kinesiology II (TBD)

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|------------------------------------|------------------------------|---|---|---|
| Certified Personal Trainer | Physical Therapist Assistant | Kinesiology and Exercise Science | Kinesiology and Exercise Science | Exercise Physiology |
| | Physical Therapy Aides | Therapeutic Recreation/Recreational Therapy | Therapeutic Recreation/Recreational Therapy | Therapeutic Recreation/Recreational Therapy |
| | Dietetic Technician | Athletic Training/Trainer | Athletic Training/Trainer | Athletic Training/Trainer |
| | | | Dietitians and Nutritionists | Physical Therapist |

| Occupations | Median Wage | Annual Openings | % Growth |
|------------------------------|-------------|-----------------|----------|
| Athletic Trainers | \$53,450 | 215 | 22% |
| Exercise Physiologists | \$41,662 | 33 | 33% |
| Coaches and Scouts | \$40,010 | 2,133 | 23% |
| Dietitians and Nutritionists | \$57,762 | 428 | 24% |
| Recreational Therapists | \$45,906 | 74 | 24% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|--|---|
| Health Occupation Students of America (HOSA) | Volunteer at a hospital or rehabilitation center; manage a school sports team |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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



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

Successful completion of the Exercise Science and Wellness program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020



Health Science

Student course selections will determine course availability for each school year.

5332 ANATOMY & PHYSIOLOGY

PREREQUISITE: Biology

GR. 11-12 CREDIT: 1

Comprehensive study of the systems of the human body, which begins with a review of cellular biology and histology. This builds a foundation for the study of higher level organ systems and functions. Major mammalian dissection included. Anatomy and Physiology provides a firm foundation for further studies in careers in health care, such as medicine, nursing, dentistry, physical/occupational therapy, and emergency/first-aid as well as careers in coaching and athletic training. THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.

5320 HEALTH SCIENCE THEORY

PREREQUISITE: Biology

GR. 10-12 CREDIT: 1

Designed to develop advanced knowledge and skills in communication, ethical and legal responsibilities, technology, employability and interpersonal dynamics for the students who desire to pursue a career in the health care field. Learn entry level hands-on skills in patient care; take the opportunity to receive CPR and First Aid Certification and Basic OSHA Career Safe Certification; and exercise the option of being trained as a Feeding Assistant. This course will prepare the student for studies in Practicum in Health Science.

5331 PATHOPHYSIOLOGY (Nature of Disease)

PREREQUISITE: Biology

GR. 11-12 CREDIT: 1

Students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Students in Pathophysiology study disease processes, and how human systems are affected. Emphasis is placed on prevention and treatment of diseases. Students will differentiate between normal and abnormal physiology. THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.

5330 PRACTICUM IN HEALTH SCIENCE (CERTIFIED MEDICAL ASST.)

PREREQUISITE: Health Science

GR. 12 CREDIT: 2

Students enrolled in this two period class will have a chance to experience the health care field firsthand. Emphasis will be on obtaining the Certified Medical Assistant. The student will have one on one interaction with residents and staff of a long term care agency after learning patient care skills in the classroom and lab setting. Successful completion of the state written and skills exams will qualify students to be employed in long-term facilities in the state of Texas.

5321 MEDICAL TERMINOLOGY

GR. 9-12 CREDIT: 1

A course designed to develop a working knowledge of the language of medicine. Students acquire word-building skills by learning prefixes, suffixes, roots, and abbreviations. By relating terms to body systems, students identify proper use of words in a medical environment. Knowledge of medical terminology enhances the student's ability to successfully secure employment or pursue advanced education in health care

6255 Principles of Exercise and Wellness

GR. 9-10 Credit: 1

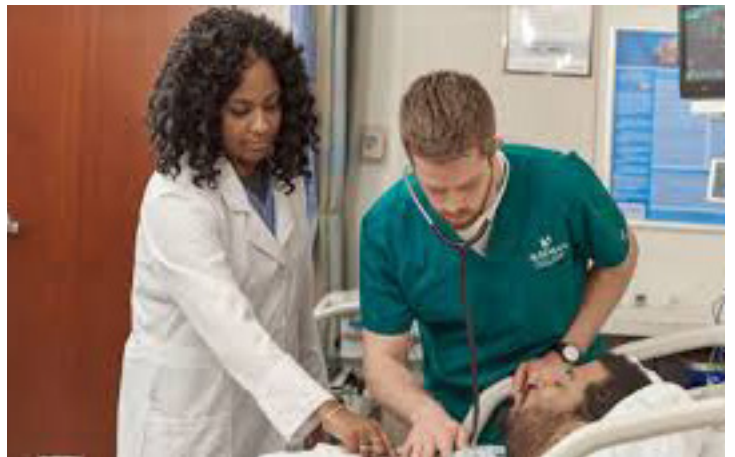
The Principles of Exercise Science and Wellness course is designed to provide for the development of knowledge and skills in fields that assist patients with maintaining physical, mental, and emotional health.

6256 Kinesiology I

GR. 9-10 Credit: 1

This course is designed to introduce students to the basic concepts of kinesiology. Students will gain an understanding of body mechanics, physiological functions of muscles and movements, the history of kinesiology, and the psychological impact of sports and athletic performance.

Kinesiology II (TBD)





Level 1 Principles of Human Services
Dollars and Sense

Level 2 Child Development

Level 3 Counseling and Mental Health
Project Based Research (PALS I)
(1HR)

Level 4 Practicum in Human Services
(PALS II) (2HR)

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

| Occupations | Median Wage | Annual Openings | % Growth |
|--|-------------|-----------------|----------|
| Child, Family, and School Social Workers | \$41,350 | 2,221 | 17% |
| Social and Community Services Managers | \$65,146 | 608 | 33% |
| Marriage and Family Therapists | \$42,266 | 217 | 35% |
| Social and Human Service Assistants | \$32,448 | 2,822 | 25% |
| Mental Health and Substance Abuse and Behavioral Disorder Counselors | \$42,120 | 576 | 39% |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED

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

LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|---|---|
| American Association of Family and Consumer Sciences, Family, Career and Community Leaders of America | Volunteer at a community center; intern for a community non-profit organization |

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



Successful completion of the Family and Community Services program of study will fulfill requirements of the Public Service Endorsement. Revised - July 2020



Family and Community Services

Student course selections will determine course availability for each school year.

5422 CHILD DEVELOPMENT

GR. 10-12 CREDIT: 1

This technical laboratory course addresses knowledge and skills related to child growth and development from pre-natal 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. Statewide articulated class - 3 hours college credit possible. Students interested in college credit must make a "B" or higher.

5427 COUNSELING & MENTAL HEALTH

GR. 10-12 CREDIT: 1

This course is an introduction to mental health services, careers, history, agencies and current issues, and the difference between functional and dysfunctional behaviors. Students develop an awareness of the factors that affect mental health by exploring traditional and emerging treatment modalities.

5421 DOLLARS & SENSE

GR. 10-12 CREDIT: .5

This class focuses on consumer practices and responsibilities, the money management process, decision-making skills, impact of technology, and preparation for human services careers. Topics studied in the class are in the areas of managing family and personal budgets, setting financial goals, consumer spending, financial records, credit and others.

5412 PRINCIPLES OF HUMAN SERVICES

GR. 9-12 CREDIT: 1

This laboratory course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care 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. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

5403 Project Based Research (PALS I)

GR. 11-12 CREDIT: 1

Occupation-specific training that focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community-services careers

5415 Practicum in Human Services (PALS II)

GR: 12 Credit: 2

Practicum in Human Services provides background knowledge and occupation-specific training that focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community-services careers.





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

Level 2 Law Enforcement I

Level 3 Law Enforcement II

Level 4 Counseling and Mental Health
Forensic Science
Practicum in Law, Public Safety Corrections, and Security

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|--|-------------------------------------|--|--|--|
| Non-Commissioned Security Officer Level II | Law Enforcement Officer | Criminal Justice/Safety Studies/Law Enforcement Administration | Criminal Justice/Safety Studies/Law Enforcement Administration | Criminal Justice/Safety Studies/Law Enforcement Administration |
| Emergency Telecommunicator | Private Investigator/Security Guard | Criminal Justice/Police Science | Criminal Justice/Police Science | Natural Resources Law Enforcement and Protective Services |
| | Code Enforcement Officer | Corrections | Juvenile Corrections | |
| | Certified Law Enforcement Planner | Criminalistics and Criminal Science | Cyber/Computer Forensics and Counterterrorism | |

| 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% |

LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|--|--|
| Texas Public Service Association; criminal justice clubs | Attend court hearings and other legal procedures |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED

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.

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



Successful completion of the Law and Public Service program of study will fulfill requirements of the Public Service Endorsement. Revised - July 2020





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

Level 2 Counseling and Mental Health

Level 3 Anatomy and Physiology

Level 4 Emergency Medical Technician-Basic
Practicum in Law, Public Safety, Corrections, and Security

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

| Occupations | Median Wage | Annual Openings | % Growth |
|-----------------------------------|-------------|-----------------|----------|
| Firefighters | \$50,149 | 2,309 | 13% |
| Fire Inspectors and Investigators | \$54,787 | 161 | 14% |
| Emergency Medical Technicians | \$34,091 | 1,880 | 31% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

| Exploration Activities: | Work Based Learning Activities: |
|---|---|
| Attend local emergency awareness events, Texas Public Service Association | Volunteer at a hospital or a fire station |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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



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

Successful completion of the Emergency Services program of study will fulfill requirements of the Public Service Endorsement. Revised - July 2020



Law, Public Safety, Corrections & Security

Student course selections will determine course availability for each school year.

5840 FORENSIC SCIENCE

PREREQUISITE: Biology and Chemistry

GR. 11-12 CREDIT: 1

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime sciences, such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science. THIS CLASS WILL COUNT AS A FOURTH YEAR SCIENCE.

5830 LAW ENFORCEMENT I

GR. 10-12 CREDIT: 1

This course is an overview of the history, organization, and functions of local, state, and federal law enforcement. Includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and classification and elements of crime. Instruction is focused on the components of the criminal justice system - the police, the courts, and corrections.

5831 LAW ENFORCEMENT II

PREREQUISITE: LAW ENFORCEMENT I

GR. 11-12 CREDIT: 1

This course provides the knowledge and skills necessary to prepare for a career in law enforcement. Includes the ethical and legal responsibilities, operation of police and emergency telecommunication equipment, and courtroom testimony. This course will examine the topic of crime in America. The course will devote time to the theories of crime causation. Various typologies of crime and criminals. Included in the course is an overview of the police, courts, and correctional services.

5427 COUNSELING & MENTAL HEALTH

GR. 11-12 CREDIT: 1

This course is an introduction to mental health services, careers, history, agencies and current issues, and the difference between functional and dysfunctional behaviors. Students develop an awareness of the factors that affect mental health by exploring traditional and emerging treatment modalities.

5832 PRINCIPALS OF LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

GR. 9-12 CREDIT: 1

This class introduces students to professions in law enforcement, security, corrections, and fire and emergency management services and examines their roles. The course provides an overview of the skills necessary for careers in law enforcement, fire service, security, and corrections.

5833 Practicum in Law, Public Safety, Corrections, and Security

GR: 11-12 Credit: 2-3

The practicum course is designed to give students supervised practical application of previously studied knowledge and skills in law, public safety, corrections, and security.

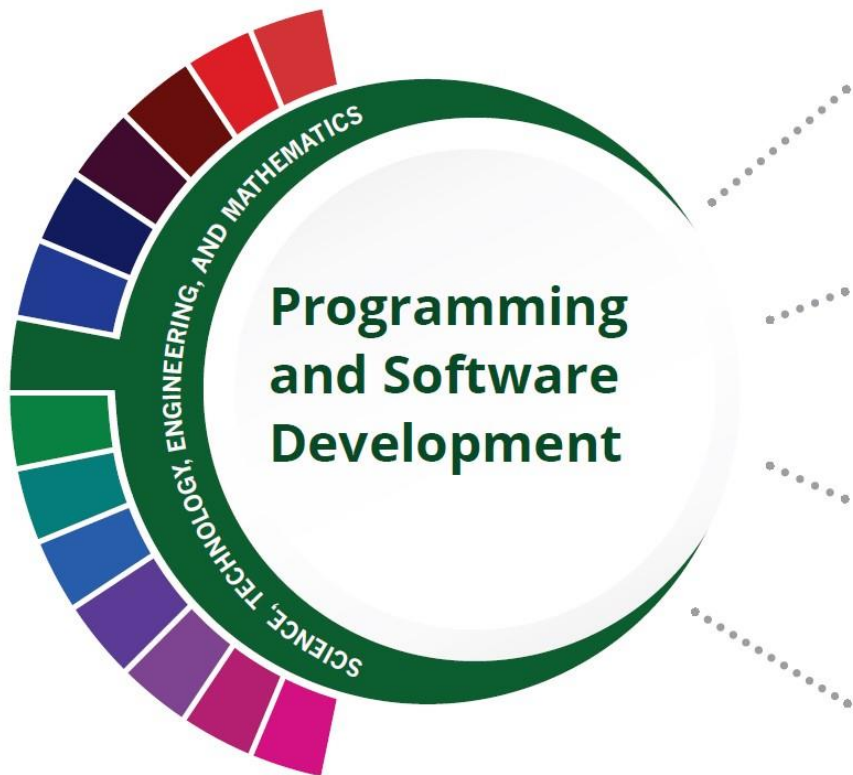
6257 Emergency Medical Technician (EMT)—Basic

PREREQUISITE: Biology, Principal of Law and Anatomy and Physiology

GR: 12 Credit: 2

Emergency Medical Technician (EMT)—Basic instructs students to meet and exceed standard knowledge needed to be a valid Emergency Medical Technician. The curriculum includes skills necessary for a student to provide entry level emergency medical care, life support, and ambulance service. The EMT—Basic course is an introductory course to concepts, knowledge, and skills needed by EMTs in the areas of communications, transportation, and recordkeeping. Students interested in working in public safety, including fire, police, and ambulance operators will be capable of performing the job expectations of an EMT safely and effectively after the completion of this course.





Level 1 Fundamentals of Computer Science (0.5) credit
Computer Science I (0.05) credit

Computer Science II

Level 2 AP Computer Science Principals

Level 3 AP Computer Science A, Math

Level 4 Gaming Programming and Design


| INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | PROFESSIONAL DEGREE |
|---|--|---|---|------------------------------|
| Oracle Certified Association JAVA SE 8 Programmer | Certified Computing Professional | Computer Programming/ Programmer Genera | Management Information Systems, General | Computer Software Engineer |
| Oracle Certified Database Associate | Cloud Technology Associate Certification | Computer Software Engineer | Computer Software Engineer | Computer Science |
| Microsoft Technology Associate, Introduction to Programming Using Python, HTML or CSS | AEM 6 Developer | Computer Science | Computer Science | Information Science/ Studies |
| Microsoft Technology Associate, Introduction to Programming Using Java or Java Script | Certified Software Analyst | Certified Software Analyst | Information Science/ Studies | |

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

| 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. |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

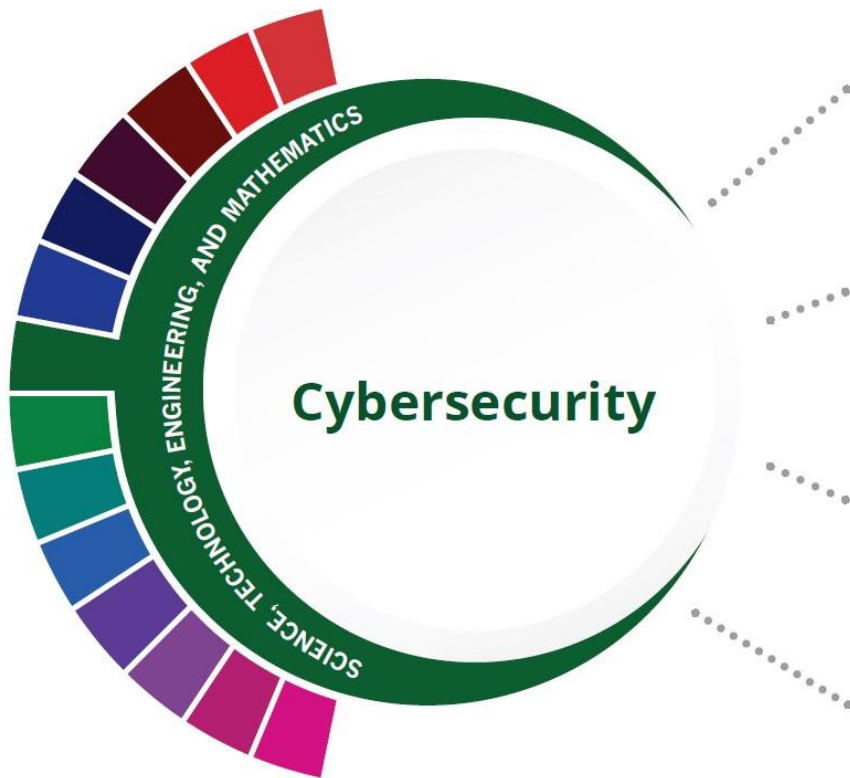
The Programming and Software Development program of study explores the occupations and education opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, 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.

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

Successful completion of the Programming and Software Development program of study will fulfill requirements of the Business and Industry and STEM endorsement if the math and science requirements are met. Revised - July 2020



COURSE INFORMATION



Level 1 Principles of Information Technology

Foundation of Cybersecurity

Level 2 AP Computer Science Principles

Digital Forensics

Level 3 AP Computer Science A-Math

Level 4 Practicum in Information Technology


| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|--|---|--|--|--|
| Oracle Certified Associate Java SE 8 | GIAC Reverse Engineering Malware | System Networking, and LAN/WAN Management | Computer Systems Networking and Telecommunications | Computer Systems Analysis/Analyst |
| Oracle Certified Database Associate | Certified Advanced Windows Forensic Examiner | Information Technology | Computer Systems Networking and Telecommunications | Information Technology |
| Cisco Certified Entry Networking Technician (CCENT) | SAP Certified Technology Professional System Security Architect | Computer and Information Sciences, General | Computer and Information Sciences, General | Computer and Information Sciences, General |
| CompTIA A+, Network+, Security+, and IT Fundamentals | Cisco Certified Network Professional Security Certification | Computer Science | Computer Science | Computer Science |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

| 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% |

| 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 an industry based certification. |

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.

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

Successful completion of the Cybersecurity program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised - July 2020



Science, Technology, Engineering and Mathematics

Student course selections will determine course availability for each school year.

5215 PRINCIPLES OF INFORMATION TECHNOLOGY

GR: 9-12 **CREDIT:** 1

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workplace and post-secondary 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.

5207 AP Computer Science Principles

GR: 9-12 **CREDIT:** 1

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

5206 AP Computer Science A

GR: 10-12 **CREDIT:** 1

AP Computer Science A is the equivalent of a first-semester, college-level course in computer science. The course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design and abstraction. Students enrolling in AP Computer Science A should have knowledge of mathematics at the Algebra II level as well as some previous programming experience, a basic understanding of networks, and knowledge of the responsible use of computer systems (including system reliability, privacy, legal issues, intellectual property, and the social and ethical ramifications of computer use). This course counts as an advanced math credit.

5229 Practicum in Information Technology

Prerequisite: A minimum of two high school information technology (IT) courses.

GR: 12 **Credit:** 2

In the Practicum in Information Technology, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an industry mentor, as an unpaid or paid internship, as part of a capstone project, or as career preparation.

5200 Foundation of Computer Science

GR: 9-12 **Credit:** .5

The course focuses on the conceptual ideas of computing so that students understand why tools and languages are used to solve problems through a study of human computer interaction, problem solving, web design, programming, data analysis, and robotics.

5201 Computer Science I

GR: 9-12 **Credit:** .5 **PREQ:** Algebra I

Introduction to object-oriented software analysis, design, and development.

5199 Foundation of Cybersecurity

GR: 10-12 **Credit:** .1

In order to manage the cybersecurity function business, you must first understand its language and its environment. This course covers the foundations of cybersecurity, including threats and vulnerabilities as well as the tools, technologies, and strategies used to manage it.

5210 Digital Forensics

GR: 11-12 **Credit:** 1

The objective of this class is to emphasize the fundamentals and importance of digital forensics. Students will learn different techniques and procedures that enable them to perform a digital investigation

5202 Computer Science II

GR: 11-12 **Credit:** 1

Further study object-oriented software analysis, design, and development.

5209 Game Programming and Design

GR: 12 **Credit:** 1 **PREQ:** Algebra I

An introductory course to video game programming, 2D and 3D design, and video game art. Students will learn the principles and practice of modeling in polygons, applying textures and materials to those models, and rendering them with appropriate lighting.



SPECIAL SERVICES

The following class placements are determined by ARD Committee approval.

GLOSSARY OF TERMS

ARD (Admission, Review, and Dismissal Committee): A committee composed of a student's parent(s) and school personnel that determines the student's eligibility to receive special education services and plans the student's educational program.

FIE (Full Individual Evaluation): Written report describing assessment used to determine eligibility and programming requirements for a student suspected of having a disability.

FAPE (Free Appropriate Public Education): Education and related services provided at the preschool, elementary, and secondary levels at no cost to parents.

IDEA (Individuals with Disabilities Education Act): Individuals with Disabilities Education and related services provided at the preschool, elementary, and secondary levels at no cost to parents.

IEP (Individual Educational Plan): A plan developed by the admission, review, and dismissal committee that includes educational goals and objectives for the student and documents the services a student needs, how the services will be provided, and how progress will be measured.

SPECIAL SERVICES 18+ PROGRAM

Students eligible for this program have met state mandated graduation requirements and have received their high school diploma. Students ages 18-22 will be afforded the opportunity to participate in the program up to four class periods (half day). These classes will be specifically targeted towards the acquisition of additional vocational skills in order to obtain meaningful employment.

LIFESKILLS LEVEL A

GR. 9-12 CREDIT: 1 each block

The LIFESKILLS A program is designed for students who have moderate to severe handicapping conditions and benefit from a self-contained classroom for at least a portion of the day.

ENGLISH LANGUAGE ARTS

INTEGRATED ENGLISH 1S - 3S

PREREQUISITE: ARD committee recommendation

GR. 9-12 CREDIT: 1 COURSES: 1S-8101, 2S-8102, 3S-8103

A course developed for students who qualify for specially designed instruction emphasizing fundamental language, reading, and writing skills. The program will emphasize vocabulary, composition skills, research skills, and provide the students with a variety of writing strategies. These courses include studies of short stories, poetry, the novel, drama, non-fiction, and myths.

PRACTICAL LANGUAGE ARTS I-IV

GR. 9-12 CREDIT: 1 COURSE: 8306 8307 8308 8309

This course is designed for the student who is a non-reader or emerging reader. Emphasis is placed on letter formation, phonics and beginning writing skills.

MATHEMATICS

INTEGRATED ALGEBRA I

GR. 9 CREDIT: 1 COURSE: 8111

A course developed for students who qualify for specially designed instruction. Integrated Algebra I is the study of functions with an emphasis on analyzing relationships using a variety of representations including concrete models, algebraic methods and the graphing calculator.

PRACTICAL ALGEBRA I

GR. 9-12 CREDIT: 1 COURSE: 8311

A course developed for students who qualify for specially designed instruction. Integrated Algebra I is the study of functions with an emphasis on analyzing relationships using a variety of representations including concrete models, algebraic methods and the graphing calculator.

PRACTICAL GEOMETRY

GR. 9-12 CREDIT: 1 COURSE: 8312

A course developed for students who qualify for specially designed instruction. Integrated Geometry is the introduction and basics of plane, solid and coordinate geometry. Stresses geometric knowledge of physical space, deductive and inductive reasoning and the integration of geometry and algebra.

PRACTICAL MATH MODELS WITH APPLICATIONS

GR. 9-12 CREDIT: 1 COURSE: 8313

A course developed for students who qualify for specially designed instruction. Math Models With Applications is designed for students not ready for Algebra II. Focuses on the K-8 and Algebra I foundations as they expand their understanding through other mathematical experiences. Students use mathematical methods to model and solve real-life applied problems involving money, data, chance, patterns, music, design and science.

PRACTICAL ALGEBRA II

GR. 9-12 CREDIT: 1 COURSE: 8314

A course developed for students who qualify for specially designed instruction. Integrated Algebra II is the study of theorems, axioms and proofs, solving equations and inequalities, sequences and series, arithmetic and geometric linear functions and relations. The student will solve and graph systems of equations and work with radicals, quadratic functions and equations, logarithms, binomials, determinants and matrices.

INTEGRATED GEOMETRY

GR. 9-12 CREDIT: 1 COURSE: 8112

A course developed for students who qualify for specially designed instruction. Integrated Geometry is an introduction and basics of plane, solid and coordinate geometry. Stresses geometric knowledge of physical space, deductive & inductive reasoning & the integration of geometry & algebra.

INTEGRATED MATH MODELS WITH APPLICATIONS

GR. 11-12 CREDIT: 1 COURSE: 8113

A course developed for students who qualify for specially designed instruction. Integrated Math Models is designed for students not ready for Algebra II. Focuses on the K-8 and Algebra I foundations as they expand their understanding through other mathematical experiences. Students use mathematical methods to model and solve real-life applied problems involving money, data, chance, patterns, music, design and science.

SCIENCES

PRACTICAL BIOLOGY

GR. 9-12 CREDIT: 1 COURSE: 8326

A course developed for students who qualify for specially designed instruction. Students investigate the structure and function of living organisms and the environment in which they live, using a variety of instructional strategies, including a special emphasis on laboratory experiences and real world application.

PRACTICAL CHEMISTRY

GR. 9-12 CREDIT: 1 COURSE: 8327

A course developed for students who qualify for specially designed instruction. Students study a conceptual approach to basic chemistry and its application to everyday life. Topics include the study of matter and the changes it undergoes. The course curriculum includes atomic structure, the periodic table, and chemical reactions. Students will investigate how chemistry is an integral part of their everyday lives. Students conduct laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving.

PRACTICAL PHYSICS AND CHEMISTRY (IPC)

GR. 9-12 CREDIT: 1 COURSE: 8328

A course developed for students who qualify for specially designed instruction. This course introduces the basic concepts of physics and chemistry. Semester one topics include elements, compounds, chemical reactions, solutions, acids and bases. Semester two physics topics include motion, forces, simple machines, light, sound, and electricity. This course may fulfill the science requirement for graduation on the MINIMUM PLAN ONLY.

SOCIAL STUDIES

PRACTICAL WORLD GEOGRAPHY STUDIES

GR. 9-12 CREDIT: 1 COURSE: 8321

A course developed for students who qualify for specially designed instruction. Emphasizes cause/effect between man and the environment and also between social groups. Focus is placed on the development of culture and how culture interacts within the major themes of geography: location, place, regions, movement, and man/environment interaction.

PRACTICAL WORLD HISTORY STUDIES

GR. 9-12 CREDIT: 1 COURSE: 8322

A course developed for students who qualify for specially designed instruction. A history of the world from primitive man in Egypt, China, India, Africa and America to: the Greek and Roman periods; the Age of Monarch, Industrial Progress, era of revolution, Nationalism and Imperialism up; the present events in history.

PRACTICAL U.S. HISTORY STUDIES SINCE RECONSTRUCTION

GR. 9-12 CREDIT: 1 COURSE: 8323

A course developed for students who qualify for specially designed instruction. Studies record of America's history from after reconstruction to the present. Helps students understand the present and prepare for the future. Students are stimulated to study motives and viewpoints and to become wiser, more democratic citizens.

PRACTICAL GOVERNMENT

GR. 12 CREDIT: 1/2 COURSE: 8324

A course developed for students who qualify for specially designed instruction. Emphasis is placed upon: the development and nature of the Constitution of the U. S. ; a study of the Congress, Executive Branch, and Judicial Branch of Government; also rights of the states, political parties, election, civil rights, state and local government. The student of free enterprise and its place in affecting local, state and national governments.

PRACTICAL ECONOMICS

GR. 12 CREDIT: 1/2 COURSE: 8325

A course developed for students who qualify for specially designed instruction. Integrated Economics is the study of our economic system that is characterized by private or corporate ownership of capital goods, by investments that are determined by private decisions rather than by state control, and by prices, production and the distribution of goods that are determined in a free manner.

HEALTH & PHYSICAL EDUCATION

INTEGRATED P.E. I-IV

GR. 9-12 CREDIT: 1 COURSE: 3015 3016 3017 3018

This is a modified course which meets the state mandated requirement for physical education. Students are enrolled through the ARD process.

ELECTIVES

SKILLED CO-OP PRACTICUM

GR. 11-12 CREDIT: 1-3

| | | |
|---------------------|------------------|------------------|
| COURSE: 8221 | 1 block of work | CREDIT: 1 |
| 8222 | 2 blocks of work | CREDIT: 2 |
| 8223 | 3 blocks of work | CREDIT: 3 |
| 8224 | 4 blocks of work | CREDIT: 4 |
| 8225 | 5 blocks of work | CREDIT: 5 |

Students enrolled in this program earn credits toward graduation through paid employment opportunities. Vocational training and job experience lead to the development of employment skills. The program is designed to help students transition from school to work with support from the Vocational Adjustment Coordinator (VAC) and/or Job Coach. Enrollment is based on individual needs, and the student must maintain paid employment.

VOCATIONAL SKILLS

COURSE: 8332 - I 8372 - II 8382 - III 8392 - IV

This training program prepares students to function as independently and productively as possible in their present and future environment. Emphasis is placed on developing appropriate attitudes, habits and work skills, communication with supervisor and peers, initiating tasks, and demonstrating appropriate social skills. Also addressed are consumer skills that encourages students to become more independent and productive in functional academics. Some skills might include sorting, identification of objects and one to one correspondence.

VOCATIONAL MATH

COURSE: 8356 - I 8357 - II 8358 - III 8359 - IV

A course developed for students who qualify for specially designed instruction. Concepts are short and concise and are followed by related practice problems on computational skills using calculators, and problem solving exercises. Students will spend their time doing relevant and practical math problems rather than just reading about them. This course offers a comprehensive coverage of basic math skills needed for everyday living and will help prepare students for the life skills needed for independent living.

General Employability Skills

GR. 9-12 CREDIT: 1 COURSE: 8499

This course provides students with knowledge of the prerequisite skills for general employment as well as the means of obtaining those skills. Employability skills include fundamentals of maintenance of personal appearance and grooming. The course also includes the knowledge, skills, and attitudes that allow employees to get along with their co-workers, make important work-related decisions, and become strong members of the work team. It is designed to guide students in obtaining the knowledge and the needed employability skills that are transferable among a variety of jobs and careers and are considered essential in any employment situation. Students will learn and apply basic knowledge of what is expected in the workplace.

Student to Industry Connection

GR. 11-12 CREDIT: 1 COURSE: 8498

The Student to Industry Connection course provides students with the opportunity to develop professional relationships with experienced individuals within the student's chosen program of study and to demonstrate necessary skills for an online virtual workplace. Students will learn acceptable virtual etiquette and professionalism for a teleworking environment. The central focus of this course is to prepare students to be 21st-century career ready through interaction with a seasoned workplace mentor. The course may include a work-based learning component. Instruction will support students with marketable skills attainment. The course is recommended for students 16 years of age or older.



Statement Prohibiting Discrimination
In The Brenham Independent School District

Brenham ISD does not discriminate on the basis of race, religion, color, national origin, sex, or handicap in providing educational services in compliance with the nondiscrimination requirements of Section 504 of the Rehabilitation Act of 1973.