Fredericksburg High School Course Selection Guide 2026-2027

Fredericksburg High School
1107 Hwy. 16 S.
Fredericksburg, Texas 78624

General Information

Dear Fredericksburg High School Students & Parents:

This guide informs you of the courses and programs available at Fredericksburg High School and to assist you in choosing courses for the school year. Remember to take into consideration the state requirements for graduation in Texas and what you plan to do after high school, whether it be college, career, or military service.

The master schedule is developed in the spring prior to the upcoming year based on courses requested by students. Selections made during course registration indicate how many teachers and sections will be needed for a course. This process allows administrators to plan and to hire for optimum academic strength. When students are permitted to randomly change schedules, teachers, and classrooms are not effectively utilized. As a result, all students are affected. Very seldom does a single course change affect only one course. Please note that some courses may not be available due to staffing and availability.

School counselors are available to answer additional questions regarding course selection and requirements. Also, your classroom teachers serve as an excellent resource for advising you on suggested courses for next year in their content areas.

Attendance Requirements - To receive credit for a final grade in a class, a student must attend the class at least 90% of the days that it is offered. A student who attends at least 75% but fewer than 90% of the days may receive credit or a final grade if they complete a plan, approved by the principal, that allows the student to fulfill the class's instructional requirements. [See Board Policy FEC for additional information.]

Award of Credits -A student at any grade level enrolled in a high school course will earn credit for the course only if the final grade is 70 or above. For a two-part (two semester, 1 credit course), the student's grades from both semesters will be averaged and credit will be awarded if the combined average is 70 or above. If the student's combined average is less than 70, the student will be awarded credit only for the semester with the passing grade. Credit recovery is available for some courses during the year and summer school.

Grade Level Classification Student classification is determined by the number of credits accumulated by the end of the preceding year. To be promoted to the next grade level, 6 credits must be earned to be classified as a sophomore (10th); 12 to be classified as a junior (11th); and 18 to be classified as a senior (12th).

High School credits awarded before 9th grade Students who have successfully completed a high school level course in middle school may be awarded the course on the high school transcript. Grades earned in these courses will not count toward a student's GPA. Once credit is awarded, students cannot repeat the course for additional state credit.

Advanced Coursework

Pre-AP Courses Pre-Advanced Placement (Pre-AP) courses are available in various subject areas and provide an enriched version of the standard curriculum. These courses use diverse instructional strategies to promote higher-order thinking, critical analysis, and problem-solving skills. Designed to prepare students for Advanced Placement (AP) or Dual Credit courses, Pre-AP and Honors classes also ensure coverage of all required high school Texas Essential Knowledge and Skills (TEKS). Pre-AP classes are included in grade point average (GPA) calculations as Tier 1.

AP Courses Advanced Placement (AP) courses are available in various subject areas and are highly rigorous, as they follow a college-level curriculum approved by the College Board. Students enrolled in these courses are expected to take the AP exams in the spring, which require an additional fee paid by the student. When funding is available, the district may offer a reduced fee. Earning a score of 3, 4, or 5 on an AP exam may grant students three or more hours of college credit. However, students should check with individual colleges and universities to confirm which AP scores and exams are accepted. AP classes are included in grade point average (GPA) calculations as Tier 1.

Dual Credit Dual Credit courses are academically rigorous and provide students the opportunity to earn college credit while still in high school. These courses satisfy high school graduation requirements and are recorded on the high school transcript. Dual Credit classes are included in grade point average (GPA) calculations as Tier 1. Students are responsible for paying tuition for these courses through Angelo State University.

UT OnRAMPS Courses are a combination of classroom instruction by a certified high school teacher and online instruction with a qualified professor from the University of Texas. These courses satisfy high school graduation requirements and students can elect to accept the college credit at the end of the year. Strong attendance is necessary for success due to the rigor and pacing of UT OnRamps courses. OnRamps courses are included in grade point average (GPA) calculations as Tier 1. For more information go to www.onramps.utexas.edu

STATE GRADUATION PLANS FOR THE CLASS OF 2018 AND BEYOND

Foundation Program	Foundation Program with Endorsement
4 Credits English English 1, English 2, English 3, Advanced English Class	4 Credits English English 1, English 2, English 3, Advanced English Class
3 Credits Math Algebra 1, Geometry, Advanced Math Class	4 Credits Math Algebra 1, Geometry, Advanced Math Class, 2nd Advanced Math Class
3 Credits Science Biology, IPC or Advanced Science Class, Advanced Science Class	4 Credits of Science Biology, IPC or Advanced Science Class, Advanced Science Class, 2nd Advanced Science Class
3 Credits of Social Studies W. Geography or W. History, US History, Government/Economics	3 Credits of Social Studies W. Geography or W. History, US History, Government/Economics
2 Credits Languages other than English (LOTE) 2 Credits in the same LOTE or 2 AP Computer Science courses	2 Credits Languages other than English (LOTE) 2 Credits in the same LOTE or 2 AP Computer Science courses
1 Credit Physical Education	1 Credit Physical Education
1 Credit Fine Arts	1 Credit Fine Arts
5.0 Credits Electives	7.0 Credits Elective
Total=22 Credits	Total=26 Credits
* The Foundation Program is available after the sophomore year and only with parent permission and a meeting with the guidance counselor.	* Distinguished Level of Achievement requires an Endorsement and Algebra 2.

ENDORSEMENTS

With the graduation requirements approved by House Bill 5 and the Texas State Board of Education, students have more choices in course work that lead to a high school diploma. All students MUST select an Endorsement area prior to entering their 9th grade year. In Fredericksburg ISD, this will be accomplished during their course selection period taking place in spring during their 8th grade year. Over the course of a student's high school career, they can elect to change Endorsements. There are five Endorsement areas in which students may choose. The Endorsement choices are:

- Arts & Humanities
- Business and Industry
- Public Service
- S.T.E.M. (Math or Science)
- Multidisciplinary Studies

Example: A student who chooses an Endorsement in Business and Industry in the Culinary Arts program of study. As part of the Foundation Program with Endorsement required course work, the courses that the student will take to satisfy the Endorsement include Introduction to Intro to Culinary Arts, Culinary Arts 1, Advanced Culinary, and Career Preparation for Program of Study.

Endorsement Course Sequences

The pages that follow are course programs of study in which students may choose to earn an Endorsement and the coherent course sequences.

Select the endorsement in which you are interested. You must meet prerequisites before enrolling in a course (listed in the course description). Unless otherwise listed, you will need to complete four credits within the endorsement sequence.

Pathways may change as the state of Texas makes annual revisions to courses and course standards.

CCMR - College, Career, & Military Readiness

The mission of every staff member at Fredericksburg Independent School District is to graduate all students prepared and ready for college, career, or military service. Faculty and staff will foster the individuality of students in their post secondary pathway goals. College ready students will be academically prepared for postsecondary education without the need for remediation. Career ready students will possess academic skills, employability skills, and technical skills required for careers after graduation (critical thinking, adaptability, technology proficiency, responsibility, persistence, team work, etc.). We honor the students who choose to enlist and we will equip them with the knowledge and skills necessary to pursue a military career successfully. Joining the military creates new opportunities for education, compensation, and training.

Performance Acknowledgments

Students may earn an acknowledgment on their transcripts because of outstanding performance in areas such as dual credit courses and bilingualism and biliteracy; on Advanced Placement, International Baccalaureate, PSAT, ACT, ASPIRE, the SAT or ACT exams; or by earning a state, nationally, or internationally recognized business or industry certification.

FHS Course Progression for Endorsement Pathways 2026-2027

Pathway	Career Cluster	Program of Study	Course 1	Course 2	Course 3	Course 4	Additional Courses
Business & Industry	Agriculture, Food, & Natural Resources	**Ag Business, Leadership & Communications**	Principles of Agriculture, Food, & Natural Resources	Professional Standards in Agribusiness (Judging 1)	Agribusiness Management & Marketing (Judging 2)	Ag Leadership, Research, & Communications (Judging 3)	
		Animal Science	Principles of Agriculture, Food, & Natural Resources	Livestock Production	Advanced Animal Science (science credit)	Career Prep for Programs of Study or Practicum	
		Ag Technology & Mechanical Systems	Principles of Agriculture, Food, & Natural Resources	Ag Structures & Fabrication (Ag Welding 1)	Ag Equipment Design & Fabrications (Ag Welding 2)		
		Food Science & Technology	Principles of Agriculture, Food, & Natural Resources	Food Technology & Safety (Foods of Texas)	Food Processing-Butchering	Food Science (science credit)	
		Plant Science	Principles of Agriculture, Food, & Natural Resources	Floral Design (fine art credit)	Advanced Floral Design	Advanced Plant & Soil Science (science credit)	Greenhouse Operation & Production
	Architecture & Construction	**Carpentry**	Principles of Construction	Construction Technology I	Construction Technology II	Career Prep for Programs of Study or Practicum	
	Arts, Audio/Video Technology, & Communication	**Graphic Design & Interactive Media (Yearbook)**	Principles of Arts, A/V Technology & Communications	Graphic Design & Illustration I	Graphic Design & Illustration II	Practicum in Graphic Design & Illustration	
		Printing & Imaging (Newspaper)	Principles of Arts, A/V Technology & Communications	Printing & Imaging Techonology I	Printing & Imaging Techonology II	Practicum in Printing & Imaging Techonology	
	Business, Marketing, & Finance	**Entrepreneurship**	Principles of Business, Marketing & Finance	Entrepreneurship I	Entrepreneurship II or *Incubator*	Practicum in Entreneurship or *Accelerator*	Statistics & Business Decision Making (math credit)
	Hospitality & Tourism	**Culinary Arts**	Introduction to Culinary Arts	Culinary Arts	Advanced Culinary	Food Science (science credit)	Career Prep for Programs of Study
	Transportation, Distribution & Logistics	**Automotive & Collision Repair**	Automotive Basics	Automotive Technology I	Automotive Technology II	Career Prep for Programs of Study or Practicum	
		Aviation	Introduction to Aerospace & Aviation	Intro to Unmanned Aerial Vehicle Flight	Aviation Ground School		
	Science, Technology, Engineering, & Mathematics	**Mechanical & Aerospace Engineering**	Principles of Applied Engineering	Scientific Research & Design 1 (science credit)	Engineering Design & Presentation I	Engineering Design & Problem Solving (science credit)	Intermediate CADD
					Intro to CADD	Scientific Research & Design 2 (science credit)	
Public Service	**Health Science**	**Diagnostics & Therapeutic Services**	Principles of Health Science	Medical Terminology	Health Science Theory/Clinical	Practicum in Health Science	Anatomy & Physiology (science credit)
		Exercise Science (Athletic Trainer)	Kinesiology 1	Kinesiology 2	Physical Therapy 1	Career & Tech Project-Based Capstone	
	Law & Public Service	**Law Enforcement**	Law Enforcement I	Criminal Investigation	Law Enforcement II	Forensic Sci	Career Prep for Programs of Study or Practicum

FHS Course Progression for Endorsement Pathways 2026-2027

STEM	**Math Pathway-Complete 5 credits and must include Algebra 2, Chemistry, & Physics**	Required: Algebra 1, Geometry/PreAP Geometry, Algebra 2/OnRamps College Algebra and two additional advanced level math courses from the following: PreCalculus, OnRamps PreCalculus, AP Calculus, OnRamps College Algebra,	
	Science Pathway - Complete 5 credits and must include Algebra 2, Chemistry, & Physics	Required: Biology/PreAP Biology, Chemistry/PreAP Chemistry, Physics/OnRamps Physics and two additional advanced science courses from the following: Anatomy & Physiology, Advanced Plant & Soil, Advanced Animal Science, Food Science, Forensic Science, AP Environmental Systems, Scientific Research & Design, Scientific Research & Design II, Engineering Design and Problem Solving	
Arts & Humanities	**Fine Arts - Complete 4 credits in the same category.**	Art, Band, Choir, Dance, Theater	
	Social Studies - Complete 3 credits required for graduation and additional 2 credits.	World Geography, AP Human Geography, World History, AP World History, US History, OnRamps US History, US History DC, Government, AP Government, Government DC, Economics, AP Economics, Economics DC, AP Psychology, Special Topics in Social Studies DC,	
	Languages Other Than English - 4 courses in the same language or 2 courses in 2 different languages.	Spanish 1, 2, 3, AP Spanish Language and Culture German 1, 2, 3, 4	
Multidisciplinary	**4x4 Pathway - complete 4 credits in each of the four foundation subject areas.**	English, Math, Social Studies, Science AND complete English 4, Chemistry and/or Physics	
	Advanced Course Pathway - Complete 4 credits in Advanced Placement or core Dual courses	Advanced Placement courses include: English Language, English Literature, Calculus, World History, Psychology, Human Geography, Government, Macroeconomics, Environmental Systems, Studio Art, Spanish Language & Culture	
		Dual credit courses include: English 3, English 4, Speech, Economics, Government, Psychology, Texas Government, US History, Art Appreciation, Music Appreciation	
		Dual enrollment courses through OnRamps include: PreCalculus, College Algebra, US History, Biology, Chemistry, Physics	

ENGLISH LANGUAGE ARTS

English 1 **Credit: 1.0**
Prereq: None **Grade: 9**
This course is a study of literature and language. Critical thinking skills are emphasized with literary readings providing models for analysis, discussion, and writing. Composition includes a study of the multi-paragraph essay with emphasis on exposition, narration, literary analysis, and research skills. In the spring, students are required to take the STAAR EOC for English 1.

English 1 PreAP **Credit: 1.0**
Prereq: None **Grade: 9**
Pre-AP English 1 focuses on the close reading, analytical writing, and language skills that have immediate relevance for students across their current courses and that are most essential for their future work in high school, college, and careers. The curriculum used in this course is created by the College Board and is a college preparation course that will move at a faster pace than regular English 1. In the spring, students are required to take the STAAR EOC for English 1.

English 1 for Speakers of Other Languages (ESOL) **Credit: 1.0**
Prereq: None **Grade: 9**
English 1 focuses on the seven strands of the essential knowledge and skills for English language arts and reading which include the four domains of language (listening, speaking, reading and writing) and their application in order to accelerate the acquisition of language skills so that students develop high levels of social and academic language proficiency. The seven strands include specifically: comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. Additionally, students should engage in academic conversations, write, read and be read to on a daily basis with opportunities for cross-curricular content and student choice. In the spring, students are required to take the STAAR EOC for English 1.

English 2 **Credit: 1.0**
Prereq: English 1 **Grade: 10**
English 2 develops students' foundational language skills in listening, speaking, reading, writing, and thinking. Learners engage in discussion, vocabulary growth, comprehension, literary and genre analysis, author's craft, and structured writing. Emphasis is placed on inquiry, research, and producing coherent, purposeful communication across multiple texts and contexts. In the spring, students are required to take the STAAR EOC for English 2.

English 2 PreAP **Credit: 1.0**
Prereq: English 1 **Grade: 10**
Pre-AP English 2 is an accelerated course preparing students for the rigor of AP English Language and Composition, and AP English Literature and Composition. The curriculum used in this course is created by College Board and is a college preparation course that will move at a faster pace than regular English 2. In the spring, students are required to take the STAAR EOC for English 2.

English 2 for Speakers of Other Languages (ESOL 2) **Credit: 1.0**
Prereq: English 1 or ESOL 1 **Grade: 10**
English 2 language arts and reading embodies the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy, authentic reading, and reflective writing to ensure a literate Texas. In the spring, students are required to take the STAAR EOC for English 2.

English 3 **Credit: 1.0**
Prereq: English 2 **Grade: 11**
English III includes an integrated study of composition, rhetoric, and a particular focus on reading analysis across genres. The course features extensive skill instruction in both research and writing. Vocabulary, correct usage, and mechanics are emphasized in all oral and written work. During the second semester the students will do all the research necessary for the writing of a research paper after studying logical reasoning and proper techniques for writing this kind of paper.

English 3 OnRamps (ENGL 1301/1302) **Credit: 1.0**
Prereq: English 1 & 2 **Grade: 11**
In these two sequential, writing-intensive courses, students research and analyze the positions held in any public debate and learn to advocate their own positions through a process of drafts and revisions.
The fall semester focuses on the ethics of argumentation and what it means to fairly represent someone with a disagreeing argument. In the spring, students analyze arguments presented by others, research a topic of their own, and craft sound and effective arguments. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion.

English 3 Dual Credit (ENGL1301/ENGL1302) **Credit: 1.0**
Prereq: English 1- 2; ASU application and qualifying TSI scores **Grade: 11**
Dual Credit English III offered through ASU is composed of ENGL 1301 (English Composition) in the fall, and English 1302 (Writing Across the Curriculum) in the spring. ENGL 1301 in the fall emphasizes the writing process, the course offers abundant practice in producing effective prose essays as well as in analyzing and discussing selected readings. ENGL 1302 in the spring is a course in critical reading and writing across the curriculum, including the research process and the research paper. Prerequisite for ENGL 1302: ENGL 1301 or equivalent.

English 4 **Credit: 1.0**
Prereq: English 1-3 **Grade: 12**
Major literary emphasis in this course is British literature; its unique oral and written traditions; major authors, periods, and works; and cultural attitudes and customs of the people of Great Britain. Works are studies with emphasis on recognition of major authors, periods, and selections representative of the time. Composition focuses on producing works that are clear and concise. Students are urged to use oral language effectively and correctly.

English 4 AP English Literature **Credit: 1.0**
Prereq: English 1-3, recommended AP English 3 **Grade: 12**
The AP Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. The course includes intensive study of representative works from various genres and periods. Students may earn college credit by passing the AP Exam at the end of the year.

English 4 Dual Credit (ENGL 2326/ENGL 2321) **Credit: 1.0**
Prereq: ASU application and qualifying TSI scores; English 3 DC (1301/1302) **Grade: 12**
Dual Credit English 4 offered through ASU is composed of ENGL 2321 (Intro to British Literature) in the fall, and ENGL 2326 (Intro to American Literature) in the spring. ENGL 2321 in the fall is a course designed to emphasize reading, comprehending, appreciating, and thinking critically with works by British writers. ENGL 2326 in the spring is a course designed to emphasize reading, comprehending, appreciating, and thinking critically with works by American writers.
Dual Credit English IV offered through ASU is composed of ENGL 2326 (Intro to American Literature) in the fall and ENGL 2321 (Intro to British Literature) in the spring. ENGL 2326 in the spring is a study of diverse works by American writers. Emphasis on reading, comprehending, appreciating, and thinking critically about the selected works within the context of American culture and literary history. ENGL 2321 in the spring is a study of diverse works by British writers. Emphasis on reading, comprehending, appreciating, and thinking critically about the selected works within the context of American culture and literary history.

Professional Communications (Speech) **Credit:0.5**
Prereq: None **Grades: 9-12**
Professional Communications blends written, oral, and graphic communication in a career-based environment. This course is designed to give the student communication skills essential to success in the workplace. Careers in the global economy require individuals to be creative, confident in presenting, capable of interacting with others socially, and a proficiency in professional oral and written communication. This class will help individuals to send clear messages, choose appropriate social behaviors, acquire essential listening skills, develop strong problem-solving strategies, obtain proper speaking skills, learn how to work well in a group setting, and gain self-confidence.

College Transitions **Credit:1.0**
Prereq: None **Grades: 12**
College Transition is designed to equip students with the knowledge, skills, and abilities necessary to be active and successful learners, both in high school and in college. Students examine numerous research based learning strategies that are proven to lead to academic success such as goal setting, effective time management, stress management, note taking, active reading, test-taking strategies, and research methods. In the College Transition course, students will research financial scholarships and grant opportunities, complete applications, and explore technical schools, colleges, and universities.

English Language Development & Acquisition 1 **Credit: 1.0**
Prereq: None **Grade: 9-12**

This course is offered during the student's first year and designed to provide instructional opportunities for secondary recent immigrant students with little or no English proficiency. These students are newcomers less than 12 months in U.S. schools and have scored at the negligible/very limited CALP level of the state approved English oral language proficiency tests. This course will be issued as an elective credit during a time frame of the student's first year. The development of communicative competence occurs through targeted lessons based on students' needs, although academic language proficiency is the focus of instruction. This course enables students to become increasingly more proficient in English in all four language domains.

English Language Development & Acquisition 2 **Credit: 1.0**
Prereq: ELDA 1 **Grade: 10-12**

This course is a second year course designed to provide educational opportunities for students who have limited experience in the American school system. More rigorous than NELD-A, this course prepares students for a smooth transition and success with the ESOL/ELPS, and ELA TEKS leading to the College & Career Readiness Standards. This course enables students to become increasingly more proficient in English in all four domains to address federal Annual Measurable Achievement Objectives (AMAOs). Students are challenged to apply higher-order thinking skills and have access to curriculum that covers reading, writing, listening, speaking, and second language acquisition

Multilingual Acculturation for Newcomers **Credit: 1.0**
Prereq: none **Grade: 9-12**

The central focus of this course is to help emergent bilingual (EB) students in embracing their acculturation experience. Acculturation refers to the cultural and social changes that an immigrant undergoes when exposed to a new environment and interacts with a different cultural group. The course takes an integrated identity approach, aiming to facilitate a successful academic journey for newcomer students as they learn a new culture and language. It offers cultural and social support tailored to the diverse needs of newcomer students, guiding them through various stages of acculturation and fostering increased community engagement and academic achievement. By incorporating research-based strategies, students will explore how they can blend their home country's culture with that of their new country, enhancing their understanding and showcasing their unique strengths to contribute to global appreciation as they prepare for their future. This course provides students with a supportive system to help them navigate and adapt during this transitional period, ultimately leading to greater success in and readiness for their academic journey.

Reading for English Language Learners **Credit:1.0**
Prereq: None **Grades: 9-12**

Reading for English Language Learners offers students reading instruction to successfully navigate academic demands as well as attain life-long literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provides students an opportunity to read with competence, confidence, and understanding. Students learn how traditional and electronic texts are organized and how authors choose language for effect. All of these strategies are applied in instructional-level and independent-level texts that cross the content areas.

SOCIAL STUDIES

World Geography **Credit:1.0**
Prereq: None **Grades: 9-12**
This course familiarizes students with the world using the five geographic themes and essential elements. Students should develop skills and knowledge about location, place, human/environmental interaction, movement, and regions. Students will be able to apply their geographic knowledge to their community, state, nation, world, and themselves. Instruction will include the integration of concepts and principles from history, economics, geography, civics, and the humanities.

AP Human Geography **Credit:1.0**
Prereq: None **Grades: 9-12**
This college-level course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. This course fulfills the graduation requirements for World Geography. Students may earn college credit by passing the AP Exam at the end of the year.

World History **Credit:1.0**
Prereq: None **Grades: 9 -12**
World History Studies is a survey of the history of humankind. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in other parts of the world. Students evaluate the causes and effects of political and economic imperialism and of major political revolutions since the 17th century and examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which constitutional governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and political concepts and the history and impact of major religious and philosophical traditions.

AP World History **Credit:1.0**
Prereq: None **Grade: 9-12**
This college level course has a chronological framework beginning with the foundations of history and continuing to the present. Truly global in nature, the course includes studies of major political, social, economic and artistic movements found in societies in Asia, Europe, Africa, and North and South America. Extensive reading and composition prepare the student for the rigors of the Advanced Placement exam. Students may earn college credit by passing the AP Exam at the end of the year.

U.S. History **Credit:1.0**
Prereq: World Geography or World History **Grade: 11**
The course content is based on the founding documents of the U.S. government, which provide a framework for its heritage. Historical content focuses on the political, economic, and social events and issues related to industrialization and urbanization, major wars, domestic and foreign policies, and reform movements, including civil rights. Students examine the impact of geographic factors on major events and eras and analyze their causes and effects. Students examine the impact of constitutional issues on American society, evaluate the dynamic relationship of the three branches of the federal government, and analyze efforts to expand the democratic process. Students describe the relationship between the arts and popular culture and the times during which they were created. Students analyze the impact of technological innovations on American life. In the spring, students are required to take the STAAR EOC for US History.

U.S. History OnRamps **Credit:1.0**
Prereq: World Geography or World History-It is highly recommended to have taken (AP)World History **Grade: 11**
In these first-year college courses, students study significant themes to uncover the range and depth of the American story. Using lectures, primary and secondary readings, videos, maps, and other graphics, students work both independently and collaboratively to develop the critical thinking skills to evaluate the historical record. History 315K surveys America from the colonial beginnings through the Civil War, and History 315L considers the post-Civil War era to the end of the 20th century. Students are assessed in multiple formats. Midterm and Final Exams include essay questions that require students to craft well-written narratives and arguments that set events in historical context, engage the complexity of cause and consequence, and make connections that reveal the dynamic of change over time. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion. In the spring, students are required to take the STAAR EOC for US History.

Special Topics in Social Studies 1 Dual Credit (HIST 1301) **Credit:0.5**
Prereq: World Geo or History, ASU application and qualifying TSI scores **Grade: 11**
This course provides a foundational survey of the central social, political, economic, and cultural histories of America and the United States from the initial contact between European explorers and Native Americans to the Civil War and its immediate aftermath. This course emphasizes the narratives of well-known and ordinary people, highlights the diversity of the American experience, and stresses the continuity and change across the period of study. ASU Course #: HIST 1301

U.S. HistoryDual Credit (HIST 1302) **Credit:1.0**
Prereq: World Geography or History-ASU application and qualifying TSI scores **Grade: 11**
This is a Dual Credit course offered through Angelo State University. The objective of this course will provide information from Post Civil War/Reconstruction to the present. The course will provide historical, political, social, cultural and economic themes as they relate to the development of the identity of the people of the United States. Events that have impacted our national character will be examined. In the spring, students are required to take the STAAR EOC for US History. This course is taught face-to-face by a campus teacher/adjunct instructor.

US Government **Credit:0.5**

Prereq: World Geography or History, U.S. History **Grade: 12**

In United States Government, the focus is on the principles and beliefs upon which the United States was founded and on the structure, functions, and powers of government at the national, state, and local levels. Students learn major political ideas and forms of government in history. A significant focus is on the U.S. Constitution, its underlying principles and ideas, and the form of government it created. Students analyze major concepts of republicanism, federalism, checks and balances, separation of powers, popular sovereignty, and individual rights and compare the U.S. system of government with other political systems. Students identify the role of government in the U.S. free enterprise system and examine the strategic importance of places to the United States. Students analyze the impact of individuals, political parties, interest groups, and the media on the American political system, evaluate the importance of voluntary individual participation in a constitutional republic, and analyze the rights guaranteed by the U.S. Constitution.

US Government Dual Credit (POLS 2305) **Credit:0.5**

Prereq: World Geog or History, US History, ASU application and qualifying TSI scores **Grade: 12**

This course is an introduction to the United States national government. The course includes an introduction to a framework for understanding United States government and politics, the constitutional basis for United States government and politics, the processes of United States government and politics, the institutions of United States government and politics, and the policies of United States government and politics. This course is taught face-to-face by a campus teacher/adjunct instructor.

Economics **Credit:0.5**

Prereq: World Geography or History, U.S. History **Grade: 12**

The focus is on the basic principles concerning production, consumption, and distribution of goods and services (the problem of scarcity) in the United States and a comparison with those in other countries around the world. Students analyze the interaction of supply, demand, and price and investigate the concepts of specialization and international trade, economic growth, key economic measurements, and monetary and fiscal policy. Students will study the roles of the Federal Reserve System and other financial institutions, government, and businesses in a free enterprise system. Types of business ownership and market structures are discussed. The course also incorporates instruction in personal financial literacy.

Economics Dual Credit (ECON 2301) **Credit:0.5**

Prereq: ASU application and qualifying TSI scores, Algebra 2 **Grade: 12**

This is an introductory macroeconomics course aimed at introducing you to the terminology, methodology and theory used by economists. It will provide you with the basic knowledge about the national economy and help you understand fundamental concepts and methods applied. The course will also introduce you to the basic economic concepts and models used in (1) understanding the functions & workings of the market system; (2) explaining and predicting the behavior of national output, unemployment, and inflation; and (3) understanding monetary and fiscal policies and their impacts on the economy.

Economics OnRamps (ECON 2302) **Credit:0.5**
Prereq: Algebra 2 **Grade: 12**

This is an introductory macroeconomics course aimed at introducing you to the terminology, methodology and theory used by economists. It will provide you with the basic knowledge about the national economy and help you understand fundamental concepts and methods applied. The course will also introduce you to the basic economic concepts and models used in (1) understanding the functions & workings of the market system; (2) explaining and predicting the behavior of national output, unemployment, and inflation; and (3) understanding monetary and fiscal policies and their impacts on the economy. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion.

AP Psychology / Special Topics in Social Studies 3 **Credit:1.0**
Prereq: World History or US History **Grades: 11-12**

This class surveys the major principles of psychology such as behavior and mental processes. The course introduces the history of psychology, human development, personality, learning, memory and thought, emotion, thinking, and language. Students will examine the full scope of the science of psychology such as the historical framework, methodologies, motivation, sensation, perception, personality development, cognition, intelligence, biological foundations, mental health, and social psychology. Students will be introduced to both individual and group psychology. Content includes the study of psychological theory and application as well as case studies. Students may earn college credit by passing the AP Exam at the end of the year.

Special Topics in Social Studies 2 Dual Credit -Texas Government (POLS 2306) **Credit:0.5**
Prereq: ASU application and qualifying TSI scores **Grade 11-12**

Origin and development of the Texas constitution, structure and powers of state and local government, federalism and intergovernmental relations, political participation, the election process, public policy, and the political culture of Texas.

Personal Financial Literacy **Credit:0.5**
Prereq: None **Grade 10-12**

Personal Financial Literacy will develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lifestyles and understand personal financial responsibility. The course will teach students to apply critical-thinking and problem-solving skills to analyze decisions involving earning and spending, saving and investing, credit and borrowing, insuring and protecting, and college and postsecondary education and training.

MATHEMATICS

Algebra 1 **Credit: 1.0**
Prereq: Grade 8 math or equivalent **Grade: 9**
In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations. In the spring, students are required to take the STAAR EOC for Algebra 1.

Geometry **Credit: 1.0**
Prereq: Algebra 1 **Grades: 9-12**
Geometry emphasizes the connection between geometry and algebra, strengthens the student's ability to formulate or analyze problems, and stresses connections among the various approaches within geometry: synthetic, coordinate, and transformational. Topics include lines, angles, triangles, circles, other polygons, solid geometry, measurement, and probability.

Geometry Pre-AP **Credit: 1.0**
Prereq: Algebra 1 **Grades: 9-12**
Pre-AP Geometry with Statistics emphasizes the connection between geometry and algebra, strengthens the student's ability to formulate and analyze problems, and stresses connections among the various approaches within geometry: synthetic, coordinate, and transformational. Topics include lines, angles, triangles, circles, other polygons, solid geometry, measurement, and probability. The statistics section of this course adds basic statistics topics, such as measures of central tendencies and measures of variation. This course is designed to provide critical thinking and processing skills necessary to be successful in future Advanced Placement mathematics courses, including AP Calculus.

Mathematical Models with Applications **Credit:1.0**
Prereq: Algebra 1 & Recommended Prereq: Geometry **Grades: 10-12**
Mathematical Models with Applications combines algebraic, geometric, and graphical reasoning to model and solve real-life applied problems involving money, data, chance, patterns, music, design, and science. This mathematics course provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices.

Algebra 2 **Credit:1.0**
Prereq: Algebra 1 **Grades:10-12**
This course extends the concepts developed in the first year of Algebra 1 while exploring linear, quadratic, rational, logarithmic, absolute value, square root, and exponential functions.

OnRamps Precalculus (MATH 2312) **Credit:1.0**
Prereq: Algebra 1, Geometry, & Algebra 2 **Grades: 11-12**
OnRamps Precalculus is an in-depth critical thinking course. Students must have a strong understanding of Algebra 2 concepts and be able to recall and apply those concepts to be successful. 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. Students will learn new concepts related to polynomial, rational, exponential and logarithmic functions in the fall. Students will be expected to work with and without calculators to broaden their skills. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion.

AP Calculus **Credit:1.0**
Prereq: Precalculus **Grades: 11-12**
AP Calculus AB is equivalent to a first semester engineering-level college calculus course. Topics include functions, limits, derivatives, definite and indefinite integrals, the Fundamental Theorem of Calculus, and differential equations. Students learn to approach concepts and problems represented either graphically, numerically, analytically, verbally or tabularly. Students will make connections amongst these representations. Students will learn to solve problems with and without technology to interpret and support conclusions. This course is essential for those students who would like to earn college credit, but it is also helpful for students who plan to take calculus in college and want a firm foundation and understanding beforehand. To be successful in AP Calculus, students need to have a solid foundation in concepts from Precalculus including trigonometry. Students may earn college credit by passing the AP Exam at the end of the year.

OnRamps College Algebra (MATH 1314) **Credit:1.0**
Prereq: Algebra 1, Geometry **Grade: 10-12**
This course is structured so that high school students receive the rigor of college courses while also meeting requirements for their high school course. This course will include an in-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices. This course will also include linear functions, absolute functions, and data analysis. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion. *This course will meet the requirements for Algebra 2.

Financial Math **Credit:1.0**
Prereq: Algebra 1 **Grades:11-12**
Financial Math is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. Financial Math is able to satisfy the third math credit.

Algebraic Reasoning **Credit:1.0**
Prereq: Algebra 1 **Grades: 9-10**
Students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses.

SCIENCE

Biology 1 **Credit: 1.0**
Prereq: None **Grades: 9-12**
Biology is an introductory course exploring the concepts of life. Topics include cell structure and function, mechanisms of genetics,biological evolution and classification, biological processes and systems, and interdependence within environmental systems. In the spring, students are required to take the STAAR EOC for Biology.

Biology 1 Pre-AP **Credit: 1.0**
Prereq: None **Grades: 9-12**
This introductory course offers a more rigorous, advanced level of experiences involving a more detailed and accelerated presentation of the content. Assignments will require a deeper understanding of biological concepts and how they apply to our world. In the spring, students are required to take the STAAR EOC for Biology.

Biology OnRamps (BIOL 1306 and 1106) **Credit:1.0**
Prereq: Biology & Chemistry 1 **Grades: 11-12**
Molecular and cellular biology is the focus of this introductory college-level biology course. This year-long course explores three big ideas of biology: the structure and function of biomolecules, the flow of energy through living systems via photosynthesis and cellular respiration, and how genetic information is expressed and transmitted both within and between cells. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion.

Integrated Physics & Chemistry (IPC) **Credit: 1.0**
Prereq: None **Grades: 9-10**
Integrated Physics and Chemistry (IPC) is a lab-oriented course that introduces basic concepts of physics and chemistry. The two disciplines are integrated in the topics of motion, waves, energy transformation, properties of matter, changes in matter, and solution chemistry. This course serves as a background for subsequent courses in chemistry and physics.

Chemistry 1 **Credit: 1.0**
Prereq: Biology & Algebra 1 **Grades: 10-12**
Chemistry is a course in which students will associate chemical principles to real world experiences. This year-long, lab-oriented course will allow students to use scientific inquiry techniques for experimentation, data collection and analysis. To be successful in this course, students will need basic knowledge of algebra, the metric system and measurement conversions, and the periodic table.

Chemistry 1 Pre-AP **Credit: 1.0**
Prereq: Biology & Algebra 1 **Grades:10-12**
This course is an intensified study of chemical principles. The content is a rigorous curriculum that includes mathematical applications in chemistry and a number of laboratory experiences. It is designed to prepare the student to advance to OnRamps Chemistry. This year-long, lab-oriented course will allow students to use scientific inquiry techniques for experimentation, data collection and analysis. To be

successful in this course, students will need a basic knowledge of algebra, the metric system and measurement conversions, and the periodic table.

Chemistry OnRamps (CHEM 1311 and 1111) **Credit:1.0**
Prereq: Biology & Chemistry 1 **Grades: 11-12**
In this lecture and lab course duo, students learn about the nature of matter and energy in the physical world; find connections between scientific concepts and real-world experiences; produce intuitive arguments; and support their arguments with quantitative measures. The lecture portion of Principles of Chemistry I addresses the nature of matter, energy, chemical reactions and chemical thermodynamics. The Introduction to Chemical Practice I lab component explores these topics through hands-on experiments, group work and simulations. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion.

Physics OnRamps (PHYS 1302 and 1101) **Credit: 1.0**
Prereq: Biology, Algebra 1, Algebra 2, **Grades: 11-12**
OnRamps Physics 1 (Mechanics, Heat, and Sound) introduces big ideas in physics, such as Newtonian mechanics, which describes objects changing their state of motion because of forces causing them to accelerate. Taken together, the topics reinforce the general idea that the behavior of many objects in the world can be described precisely with simple mathematics. This is an algebra-based (non-calculus) course in mechanics that fulfills a general physics requirement. Students will practice problem-solving and analyzing physical situations involving motion, force, energy, rotations, heat, oscillations, waves, and sound. Students will explore concepts in small groups, develop ideas, and explain them. Students can earn four hours of UT credit, with feedback and assessment provided by UT course staff. Students should be highly proficient in Algebra. This is a DUAL ENROLLMENT course, and students can accept college credit upon successful completion.

Anatomy and Physiology **Credit:1.0**
Prereq: Biology & Chemistry, Algebra 1 **Grades: 11-12**
This course is the study of the structure and function of the human body. This course begins with the physical basis of life and proceeds through levels of complexity from cellular studies through the study of the whole organism, emphasizing the complementary nature of structure and function. This course is particularly recommended for students who expect to work in the health field.

AP Environmental Systems **Credit: 1.0**
Prereq: Biology & IPC or Chemistry **Grades: 11-12**
AP Environmental science (APES) provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Students may earn college credit by passing the AP Exam at the end of the year.

Forensics **Credit: 1.0**
Prereq: Biology and Chemistry **Grades: 11-12**
Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene investigation, questioning, criminal behavior characteristics, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, trace evidence collection, ballistics, body fluid collection, and blood spatter analysis. Students will learn the history, legal aspects, and career options available in forensic science.

Advanced Plant & Soil Science **Credit:1.0**
Prereq: Biology, Chemistry/IPC/Physics, at least 1 course in the AFNR cluster **Grades: 11-12**
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.

Advanced Animal Science **Credit: 1.0**
Prereq: Biology, Algebra 1,Geometry; & IPC or Chemistry; & either **Grades: 11-12**
Small Animal Management, Equine Science, or Livestock Production
Advanced Animal Science demonstrates principles relating to the interrelated human, scientific, and technological dimensions of animal agriculture and the resources necessary for producing domesticated animals; applies the principles of genetics and breeding to livestock improvement; examines animal anatomy and physiology in livestock species; recognizes policies and issues in animal science; discusses slaughter livestock operations; and explores methods of marketing livestock.

Food Science **Credit:1.0**
Prereq: Biology, Chemistry/IPC/Physics, at least 1 course in the AFNR cluster **Grades: 11-12**
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 in food products, the principles underlying food processing, and the improvement of foods for the consuming public.

Scientific Research and Design 1 **Credit: 1.0**
Prereq: Biology, Chemistry **Grades: 10-12**
The course has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. Students will design and develop a rocket to carry a one pound payload one mile high and learn the physics of flight.

Scientific Research and Design 2 **Credit: 1.0**
Prereq: SR&D 1, EDP 1 **Grades: 12**
Students will conduct research in the engineering design, prototyping with 3D printing and manufacture of final versions of parts.

Engineering Design and Problem Solving **Credit: 1.0**
Prereq: EDP1, Intro to ICADD **Grades: 12**
Students will design and develop a high altitude rocket to be tested at the US Army's White Sands Missile Range in New Mexico.

Foreign Language

Spanish 1 **Credit:1.0**
Prereq: None **Grades: 9-12**
In this introductory course, students will study the Spanish language, as well as the culture and heritage of the Spanish-speaking world. Students will develop basic speaking, writing, reading, and listening skills in Spanish with instruction focused on topics related to the everyday life of a student. The students will learn conversational responses and work with the grammar items essential for understanding. The students will use conversation and vocabulary in interpersonal, interpretive, and presentational modes as the basis for meeting the TEKS. The expected outcome of this course is developing Novice mid-high proficiency.

Spanish 2 **Credit:1.0**
Prereq: Spanish 1 **Grades: 9-12**
Spanish 2 is a continuation of the development of the fundamental language skills of listening, speaking, reading, and writing with added emphasis on oral proficiency. New vocabulary and more complete grammatical structures are emphasized along with relevant cultural topics.

Spanish 2 for Native Speakers **Credit:1.0**
Prereq: None **Grades: 9-12**
Spanish for native speakers is a course designed for the Spanish speaker. The students in this course have attained mastery in speaking Spanish, but require continued study in grammar, vocabulary, and writing. Students will have to take a short assessment and score in the proper range to qualify for this course. After successful completion of this course, students will receive Spanish 1 and 2 credit.

Spanish 3 **Credit:1.0**
Prereq: Spanish 1 & 2 **Grades: 9-12**
Spanish 3 is the intermediate course in the Spanish language. The students will integrate the conversation skills, vocabulary, and grammar items learned in the first two courses. Emphasis is placed on expanding basic vocabulary and improving listening, reading, speaking, and writing skills. More complex and challenging grammatical structures are introduced at this level. Both students and teachers are expected to use their speaking skills as much as possible in the classroom. Students will continue to use conversation to meet the TEKS goals of communication, cultures, connections, comparisons, and communities. The expected outcome of this course is to develop Intermediate-low to Intermediate-mid proficiency. This course is conducted in Spanish for a significant amount of time.

AP Spanish Language and Culture **Credit:1.0**
Recommended Prereq: Spanish 1, 2, & 3 **Grades: 9-12**
The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the

course is taught almost exclusively in Spanish. Students may earn college credit by passing the AP Exam at the end of the year.

German 1 **Credit:1.0**
Prereq: None **Grades: 8-12**
In this introductory course, students will study the German language, as well as the culture and heritage of the German-speaking world. Students will develop basic speaking, writing, reading, and listening skills in German with instruction focused on topics related to the everyday life of a student. The students will learn conversational responses and work with the grammar items essential for understanding. The students will use conversation and vocabulary in interpersonal, interpretive, and presentational modes as the basis for meeting the TEKS. The expected outcome of this course is developing Novice mid-high proficiency.

German 2 **Credit:1.0**
Prereq: German 1 **Grades: 9-12**
German 2 continues to introduce students to German language and culture. Students will develop speaking, writing, reading, and listening skills in German with instruction focused on topics related to the everyday life of a student. The students will continue to learn communicative skills, including grammar and vocabulary in the context of interpersonal, interpretive, and presentational modes as the basis for meeting the TEKS. The expected outcome of this course is developing Intermediate-Low proficiency. This course is conducted in German for a significant amount of time.

German 3 **Credit:1.0**
Prereq: German 1 & 2 **Grades: 9-12**
German 3 is the intermediate course in the German language and stresses the advancement of reading, writing, speaking, and listening skills. Students will review terminology learned in the first two courses as they also expand and enhance their vocabularies and integrate more complicated grammatical concepts. Students will continue to use conversation to meet the TEKS goals of communication, cultures, connections, comparisons, and communities. The expected outcome of this course is to develop Intermediate-low to Intermediate-mid proficiency.

German 4 **Credit:1.0**
Prereq: German 1-3 **Grades: 9-12**
German 4 has a greater emphasis on reading comprehension and listening and speaking skills as students practice through the use of authentic materials. An extensive and ongoing grammar review and building of vocabulary are also included. The expected outcome of this course is developing Intermediate-mid to Intermediate-high proficiency.

FINE ARTS

Art 1 **Credit:1.0**
Prereq: None **Grades: 9-12**
This is an introductory course for visual arts. This class emphasizes the elements of art and principles of design through a variety of projects. This course introduces students to a variety of mediums including graphite, colored pencil, paint, and more. Students develop skills in creativity, problem-solving, composition and manipulating art media.

Art 2 **Credit:1.0**
Prereq: Art 1 **Grades: 9-12**
This course provides students with an opportunity to further develop their artistic skills and to begin developing their own artistic voice. More advanced techniques and mediums will be introduced. Students are challenged to develop more complex designs and artistic compositions in response to more open-ended project requirements. They will have opportunities for both 2D and 3D exploration. Students will evaluate personal, peer, and historical artwork.)

Art 3 **Credit: 1.0**
Prereq: Art 2 or teacher approval **Grades: 10-12**
This course will challenge students with further opportunities to explore a variety of mediums and develop their artistic voice through both guided assignments and personally chosen projects. The student is expected to develop original compositions and designs using individual creativity. Students will develop a personal style and demonstrate effective use of media at an advanced level. Students will have opportunities for both 2D and 3D exploration. They will evaluate personal, peer, and historical artwork.

Art 4 **Credit: 1.0**
Prereq: Art 3 or teacher approval **Grades: 11-12**
This course is for the highly motivated advanced art student who wishes to further develop their artist voice and who wishes to potentially focus on developing a particular medium or art form. Students are developing and creating artwork based upon individual and unique ideas. Students are encouraged to try new techniques and continue to push the boundary of art and creativity. They will evaluate their work throughout the artistic process solving problems that might arise. Students will create and critique a final portfolio of work.

AP Studio Art-Drawing **Credit: 1.0**
Prereq: AP 2-D Art and Design **Grades: 11-12**
AP Drawing is an introductory college-level Art and Design course.This portfolio is designated for work that focuses on the use of mark-making, line, surface, space, light and shade, and composition. Students will develop a portfolio of work based upon an inquiry/sustained investigation. Students should be highly self-motivated and possess knowledge of advanced art techniques in a variety of media. This is a studio style class requiring independent art development, frequent critique from both teacher and peers, and the creation of a portfolio of work that demonstrates research, practice, experimentation, and revision. This class is a college level workload and will require time outside of class for most students to successfully meet the portfolio requirements. For questions, please see Mrs. Elliott in Room 132.

AP 2-D Art & Design **Credit: 1.0**
Prereq: Art 1-3 **Grades: 11-12**
AP 2D Design is an introductory college-level Art and Design course.This portfolio is designated for work that focuses on the application of two-dimensional (2-D) elements and principles of art and design. Students will develop a portfolio of work based upon an inquiry/sustained investigation. Students should be highly self-motivated and possess knowledge of advanced art techniques in a variety of media. This is a studio style class requiring independent art development, frequent critique from both teacher and peers, and the creation of a portfolio of work that demonstrates research, practice, experimentation, and revision. This class is a college level workload and will require time outside of class for most students to successfully meet the portfolio requirements. For questions, please see Mrs. Elliott in Room 132.

AP 3D Art and Design **Credit: 1.0**
Prereq: AP 2-D Art and Design, teacher approval **Grades: 11-12**
AP 3-D Art and Design is an introductory college-level Art and Design course.This portfolio is designated for work that focuses on the application of three-dimensional (3-D) elements and principles of art and design. Students will develop a portfolio of work based upon an inquiry/sustained investigation. Students should be highly self-motivated and possess knowledge of advanced art techniques in a variety of media. This is a studio style class requiring independent art development, frequent critique from both teacher and peers, and the creation of a portfolio of work that demonstrates research, practice, experimentation, and revision. This class is a college level workload and will require time outside of class for most students to successfully meet the portfolio requirements.

Art Appreciation Dual Credit (ARTS 1301) **Credit:1.0**
Prereq: ASU application and qualifying TSI scores **Grades: 10-12**
This is a Dual Credit course offered through Angelo State University and is designed as an introduction to the visual arts leading to a basic understanding and appreciation of the visual arts and its history. Lectures are presented thematically beginning with fundamental questions regarding the meaning, purpose and style of art and concluding with an introductory survey of art from major historical periods. This class will be delivered entirely online.

Music Appreciation **Credit:1.0**
Prereq: None **Grades: 9-12**
This course will be spending the year going through the basics of music theory, history, genre, and instruments. We also spend time learning what career options musicians can obtain. Students study composers and their works, music of other cultures, and the various forms and styles of regional and global music. The main goal of this course is for students to understand the importance and role of music in our society and the world. *This can also be taken through Angelo State University as dual credit and is delivered entirely online (MUSI 1306).

Band 1-4 **Credit:1.0**
Prereq: band director approval **Grades: 9-12**
ALL Band classes focus on character development, individual content knowledge, and professional soft skills. All students involved in the Band program are expected to participate in all applicable activities throughout the year to include Summer Band, Fall Marching Band, and at least one Spring Concert Ensemble (Honor or Symphonic). Students are expected to remain in the Band Class through the year and there is not an option to just be in Marching Band or just Concert Band. Graded performances and rehearsals outside of the school day are an expectation for this course throughout the year. The Band program has high standards, because our students can meet and exceed them. (Students receive PE credit for the Fall semester Marching Band.)

Applied Music 1-4 **Credit:1.0**
Prereq: Concurrent registration in band, director approval **Grades: 9-12**
Applied music is an additional band class that students can take to work specifically on individual playing technique. Students MUST be enrolled in regular BAND in order to take Applied Music. Students in Applied Music are required to audition for the ATSSB All-Region Band, and pass off various scales and etudes in preparation for the audition. In the spring semester students will potentially have the opportunity to learn and play a secondary instrument in the Symphonic Band if they are already in the Honor Band on their primary instrument. Applied Music allows for one-on-one time with band directors in addition to independent practice time.

Jazz Band **Credit:1.0**
Prereq: band director approval **Grades: 9-12**
The Jazz Studies course is for advanced students. Musical studies in this class are in the style of American Jazz and Blues music to include the full range of styles involved in performance and the historical/cultural settings of the genre. Students will study the advanced skills required to perform these different styles of music throughout a variety of performance-based efforts. Graded performances and rehearsals outside of the school day are an expectation of all students in the course. Registration for the class is by approval of the Director of Bands only. Students MUST be concurrently enrolled in Band 1-4 and must participate in the All-Region Jazz audition process every year to remain in the course.

Color Guard 1-4 **Credit:1.0**
Prereq: Tryout required **Grades: 9-12**
The Color Guard classes are active for the entire school year, focusing on musical expression and performance through manipulation of equipment (flag, rifle, and sabre) while exploring dance technique and chorographical composition. Participation includes camps and rehearsals beginning in May (of the previous year) and running through the summer, after school rehearsals through the year, winter camps, and performances throughout the fall and spring semester. The Color Guard performs at pep rallies, varsity football games, community events, and competes in marching contests and winter competitions sponsored by the UIL and the Texas Color Guard Circuit. * This course satisfies the Fine Arts and PE requirements for the High School Graduation Plan.

JV Choir 1-4 **Credit:1.0**
Prereq: None for Choir 1 **Grades: 9-12**
Previous singing experience is not required for this course. The curriculum emphasizes the basics of vocal technique, sight reading, and music theory. Graded performances and rehearsals outside of the school day are an expectation for this course.

Varsity Choir **Credit:1.0**
Prereq: audition and choir director approval **Grade 9-12**
Previous singing experience is expected for this course. The curriculum emphasizes the basics and advancement of vocal technique, sight reading, and music theory. Graded performances and rehearsals outside of the school day are a requirement for this course.

Floral Design **Credit:1.0**
Prereq: None **Grades: 9-12**
Floral Design is a technical course that prepares students to design and arrange floral materials, tropical and blooming plants for special occasions, and for use and placement in interior locations. Topics of instruction include identification and classification of fresh-cut floral materials; fresh flower and foliage care and handling; design principles, elements, and mechanics; and the construction of basic and contemporary geometric designs, boutonnieres, and corsages using fresh-cut, dried, and/or permanent floral materials. Also included is related information on tropical foliage and blooming plant identification, interior landscape design, cultural requirements and tasks for maintaining healthy interior plants, and safe work practices.

Theater Arts 1-4 **Credit:1.0**
Prereq: None **Grades: 9-12**
Theater 1 includes studies in improvisation, pantomime, voice and diction, and a study of beginning acting techniques. Students will perform at least one major performance during the school year. Theater 2 continues the study of the cultural contributions of the theatre, its structure, variety and evaluation. Greater emphasis is given to the history of theatre. Theater 3 explores the highly complex areas of theatre. Emphasizes acting, elements of play production, and study of theatrical literature. Students will be involved in one to two major performances during the course of the class. Theatre 4 is a higher level course continuing the study of cultural contribution of theatre, its plays, and its performance and production styles. Basic principles of production are applied through performances in various theatrical modes for major productions. Students will produce their own play during the course of the year.

Theatre Production 1-4 **Credit:1.0**
Prereq: None **Grades: 9-12**
This course is designed for the production side of the Theatre. Students will explore the process of creating a play from the ground up (i.e. writing and eventually directing original productions). They will also participate in designing sets, creating visual art, light plots, costume design and engineering sound for major productions throughout the year. Students will manage backstage crews during a variety of shows.

Theatre One Act 1-4 **Credit:1.0**

Prereq: tryout is required,director approval **Grades: 9-12**

This course is designed for the competition side of the Theatre. Students will learn what it means to prepare a piece for competition and to receive constructive criticism. They will learn the importance of theater generalism (i.e. backstage work as well as front of stage.) A student must audition to be selected for this class.

Physical Education/Athletics

Physical Education (Boys & Girls) **Credit:1.0**
Prereq: None **Grades: 9-12**
In Physical Education, students acquire the knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically active lifestyle. The student exhibits a physically active lifestyle and understands the relationship between physical activity and health throughout the lifespan.

Boys/Girls Athletics **Credit:1.0**
Students will need to complete a physical and Rank One registration. **Grades: 9-12**
This program is governed by the University Interscholastic League and all rules established by the league are strictly supported. UIL athletics are available to all students who wish to participate in sports and follow the guidelines established by the coaches. UIL sports offered include football, basketball, baseball, softball, soccer, track, tennis, golf, volleyball, and cross country. These sports are available on the varsity and sub-varsity levels. An off-season program is conducted in these sports. A student may choose to participate in all sports or to specialize in one or two. Academics are stressed first and athletics second. Grade averages must be maintained at a passing level if a student wants to continue to participate in athletic activities. Students enrolling in UIL activities must possess a competitive spirit, a proper attitude and a willingness to work under the supervision of coaches not only during class, but also on their own time. These classes will meet every day. Before and after school, as well as holiday practices and games required for participation in extracurricular athletic teams. Approval from the head coach in the sport or the athletic director is needed for all UIL sports.

Additional courses that will satisfy the PE requirement include ROTC 1; Band (Fall semester only, 2 semesters required); Cheer 1; Dance 1 (Red Hotts).

Students may not earn more than 4 pe/athletic credits towards graduation requirements.

CAREER AND TECHNICAL COURSES
Health Science

Principles of Health Science **Credit:1.0**
Prereq: None **Grades: 9-12**
This course provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

Medical Terminology **Credit:1.0**
Prereq: None **Grades: 10-12**
This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

Health Science Theory & Clinical **Credit:1.0**
Prereq: Biology; Recommended Principles of Health Science **Grades:11- 12**
This course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will have job shadowing experiences for continued knowledge and skill development. Students also should identify the employment opportunities, technology, and safety requirements of the healthcare industry. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment. Note: Must be 16 years old; a TB test and flu shot is required; Red scrubs are required.

Practicum of Health Science **Credit: 2.0**
Prereq: Biology; Health Science Theory **Grades:11- 12**
The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

Exercise Science and Wellness

Kinesiology 1 **Credit:1.0**
Prereq: trainer approval required **Grades: 9-12**
Must have prior approval from the instructor. 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, and the psychological impact of sports and athletic performance. Students will also become a part of the Student Athletic Trainer program where they will have to dedicate time OUTSIDE of the school day to sports practices and games.

Kinesiology 2 **Credit:1.0**
Prereq: Kinesiology 1, trainer approval required **Grades: 10-12**
Must have prior approval from the instructor. The Kinesiology II course is designed to provide students an advanced level of knowledge, skills, and understanding of body composition and the effect on health, nutritional needs of physically active individuals, qualitative biomechanics, application of therapeutic modalities, appropriate rehabilitation services, and aerobic training intensity programs. The course is designed to allow students to advance their understanding of professional standards, employability skills, and ethical and legal standards. This class also is associated with the student Athletic Training Program. Therefore, students will have OUTSIDE of the school day requirements to sports practices and games.

Physical Therapy 1 **Credit:1.0**
Prereq: Kinesiology 1 & 2, trainer approval required **Grades: 11-12**
Must have prior approval from the instructor. Physical Therapy I is designed to provide basic concepts, knowledge, and skills needed to work within physical therapy practice under the supervision of a licensed physical therapist/physical therapist assistant. Specifically, the course focuses on proper management of patient care to safely assist patients/therapists; management of equipment as it relates to physical therapy; strengthening and conditioning; and communication skills to work effectively within a physical therapy practice.

Career & Technical Education Capstone Project **Credit:1.0**
Prereq: Kinesiology 1 & 2, Physical Therapy 1 **Grades:12**
Must have prior approval from the instructor.
Students independently investigate real-world problems, issues, or interests. This course is designed for students to develop and enhance essential skills that a clinician may utilize in a clinical setting. Students partner with mentor(s) or advisor(s) to develop an athlete case study or sports injury case study. Students conduct research, compile findings, implement injury evaluation, rehabilitation programming, and return to sport activities. Students may also be provided with opportunities to shadow different professional settings outside of FHS athletic training (FMS, orthopedic office, physical therapy office, personal training gym, etc.) At the end of the year students will present their work to a relevant audience that may include industry experts.

Teaching and Learning

Instructional Practices **Credit:2.0**
Prereq: at least one course in the Teaching & Learning cluster **Grades: 11-12**
Instructional Practices is a field-based (practicum) course that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and perform other duties of teachers, trainers, paraprofessionals, or other educational personnel.

Practicum in Education and Training **Credit:2.0**
Prereq: Instructional Practices **Grades: 12**
Practicum in Education and Training is a field-based course that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and perform other duties of classroom teachers, trainers, paraprofessionals, or other educational personnel.

Law Enforcement

Law Enforcement 1 **Credit:1.0**
Prereq: None **Grades: 9-12**
Law Enforcement 1 is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

Law Enforcement 2 **Credit:1.0**
Prereq: Law Enforcement 1 **Grades: 10-12**
Law Enforcement 2 provides the knowledge and skills necessary to prepare for a career in law enforcement. Students will understand ethical and legal responsibilities, patrol procedures, first responder roles, telecommunications, emergency equipment operations, and courtroom testimony.

Criminal Investigations **Credit:1.0**
Prereq: None **Grades: 10-12**
Criminal Investigation is a course that introduces students to the profession of criminal investigations. Students will understand basic functions of criminal investigations and procedures and will learn how to investigate or follow up during investigations. Students will learn terminology and investigative

procedures related to criminal investigation, crime scene processing, evidence collection, fingerprinting, and courtroom presentation. Through case studies and simulated crime scenes, students will collect and analyze evidence such as fingerprint analysis, bodily fluids, hairs, fibers, shoe and tire impressions, bite marks, drugs, tool marks, firearms and ammunition, blood spatter, digital evidence, and other types of evidence.

Culinary Arts

Introduction to Culinary Arts **Credit:1.0**
Prereq: None **Grades: 9-12**
Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry level course for students interested in pursuing a career in the food service industry. This course is offered as a classroom and laboratory-based course.

Culinary Arts 1 **Credit:2.0**
Prereq: Intro to Culinary Arts **Grades: 10-12**
Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification or other appropriate industry certifications. This course is offered as a laboratory-based course.

Advanced Culinary Arts **Credit:2.0**
Prereq: Culinary Arts **Grades: 11-12**
Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards in order to prepare students for success in higher education, certifications, and/or immediate employment.

Entrepreneurship

Principles of Business **Credit:1.0**
Prereq: None **Grades: 9-12**
In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, the marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in business, marketing, and finance.

Entrepreneurship 1 **Credit:1.0**
Prereq: recommended Principles of Business **Grades: 9-10**
Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services.

Entrepreneurship 2 **Credit:1.0**
Prereq: Entrepreneurship 1 **Grades: 10-12**
The purpose of the course is to prepare students with the knowledge and skills needed to become a successful entrepreneur within an innovative marketplace. The goal and outcome of the course is for students to have their business launched by the end of the course or have the tools necessary to launch and operate their business. Students are encouraged to work in close cooperation with local industry leaders, community members, and educators to develop ideas and objectives, complete a business model canvas, pitch to potential investors, register with governmental agencies, develop their brand identity, and participate in local chamber of commerce meetings and events.

Incubator (Entrepreneurship 2) **Credit:1.0**
Prereq: Entrepreneurship 1 **Grades: 10-12**
Instructor approval required
This course is designed to get students excited about becoming true entrepreneurs by giving them the opportunity to create and fully develop their own products or services. Real-world entrepreneurs and business experts serve as coaches and mentors guiding student teams entrepreneurs and business experts serve as coaches and mentors guiding student teams through the process of ideation, market research, and business plan development. Over the course of the year, student teams learn about marketing, accounting, as well as the legal aspects of starting a business. They have access to a network of professionals to further develop their skills (teamwork, problem-solving, presentation, communication) for college and career readiness. Pitch Week helps to further fire the entrepreneurial spirit by putting student teams in front of actual investors so they can pitch their innovative idea to win funding and turn their wishful thinking into a reality.

Accelerator (Practicum in Entrepreneurship) **Credit:2.0**
Prereq: Incubator **Grades: 11-12**
Instructor approval required
ACCELeratoredu transitions businesses founded in INCubatoredu into sustainable, functioning ventures. ACCELeratoredu fosters startup development in customer acquisition, production, and business processes as it suits their business. The experience models a real-life start-up accelerator focused on developing teams through mentorship, education, connections, and accountability to launch a company. Students work through major content areas, including personal and professional time and project management, goal setting, banking and finances, customers and sales, legal and business regulations, marketing, solution development and feature testing, stang, and technology planning.

Agriculture, Food, and Natural Resources

Principles of Ag, Food, and Natural Resources **Credit:1.0**
Prereq: None **Grades: 9-12**
Principles of Agriculture, Food & Natural Resources is a comprehensive course that provides students with the knowledge and skills necessary for career planning and advanced study in the broad field of agriculture/agribusiness. Topics of instruction include the agricultural industry and its global importance; agricultural leadership organizations; agricultural research; concepts of animal and plant science; basics of mechanized agriculture; personal and communication skills; and citizenship and cooperation. It is recommended for all students interested in the Agriculture and Natural Resource track to take their freshmen year.

Livestock Production **Credit:1.0**
Prereq: 2 credits with one in a Level 2 or higher from the AFNR Career Cluster **Grades: 10-12**
In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry. To prepare for careers in the field of animal science, students must attain academic skills and knowledge, acquire knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Professional Standards in Agribusiness (Judging 1) **Credit:1.0**
Prereq: teacher approval **Grades: 9-12**
This course primarily focuses on leadership, communication, employer-employee relations, and problem solving as they relate to agribusiness. To prepare for careers in agribusiness systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to leadership development and the workplace, and develop knowledge and skills regarding agricultural career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. *Students must complete the full year, credit is awarded in the spring.*

Agribusiness Management and Marketing (Judging 2) **Credit: 1.0**
Prereq: Judging 1 **Grades: 10-12**
To be prepared for careers in agribusiness systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to agribusiness marketing and management and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. This is designed to provide a foundation to agribusiness management and leadership by building speaking skills, decision making skills and teamwork.

Agricultural Leadership, Research & Communications (Judging 3) **Credit:1.0**
Prereq: Judging 1 & 2 **Grades: 11-12**
This is the Judging 3 course. Agricultural Leadership, Research and Communications will focus on challenging Agriculture, Food, and Natural Resources (AFNR) students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.

Advanced Floral Design **Credit:1.0**
Prereq: Floral Design **Grades: 11-12**
Students build on the knowledge from Floral Design and are introduced to more advanced concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced design and providing 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.

Greenhouse Operations **Credit:1.0**
Prereq: Prin. AFNR recommended **Grades: 10-12**
Greenhouse Operation and Production is designed to develop an understanding of greenhouse production techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Food Tech & Safety **Credit:1.0**
Prereq: Prin. AFNR recommended **Grades: 10-12**
Food Technology and Safety examines the food technology industry as it relates to food production, handling, and safety. To prepare for careers in value-added and food processing systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to value-added and food processing and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Food Processing & Lab **Credit:2.0**
Prereq: Prin. AFNR recommended **Grades: 11-12**
Food Processing and Lab focuses on the food processing industry with special emphasis on the handling, processing, and marketing of meat and other food products. Students will gain hands-on experience in the fabrication of meat products within the meat processing laboratory. To prepare for careers in food products and processing systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to natural resources and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Ag Structures Design & Fabrication (Welding 1) **Credit:1.0**
Prereq: Prin. AFNR **Grades: 10-12**
This course prepares students to be prepared for careers in mechanized agriculture and technical systems, and to attain knowledge and skills to agricultural facilities design and fabrication. Students explore career opportunities, entry requirements, and industry expectations.

Ag Equipment Design & Lab (Welding 2) **Credit: 2.0**
Prereq: Ag Structures **Grades: 11-12**
To be prepared for careers in mechanized agriculture and technical systems, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural equipment design and fabrication. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

Automotive & Collision Repair and Carpentry

Automotive Basics **Credit:1.0**
Prereq: None **Grades: 9-10**
Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.This is a semester-long class and is paired with Principles of Construction for a full year course.

Automotive Technology 1 **Credit 2.0**
Prereq: Automotive Basics **Grades: 10-12**
Automotive Technology 1 includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. This course includes applicable safety and environmental rules and regulations. Students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Automotive Technology 2 **Credit 2.0**
Prereq: Automotive Basics, AutoTech 1 **Grades: 11-12**
Students will use all their knowledge and skills from previous courses and this course includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Principles of Construction **Credit:1.0**
Prereq: None **Grades: 9-10**
Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. For safety and liability considerations, limiting course enrollment to 15 students is recommended. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

Construction Technology 1 **Credit 2.0**
Prereq: Principles of Construction **Grades: 10-12**
This is a technical course that builds on the knowledge gained in Principles of Construction. This is a hands-on course that focuses on the building process in which students will construct a small structure. Students will gain knowledge of foundations, framing, roof framing, windows, vapor barriers, siding, roofs, and other important components of construction. The knowledge gained in this course will give students a solid foundation on the basics of construction. Students will also take and pass the S/P2 safety certification exam as well as the Home Builders Institute (HBI) Core curriculum exam.

Construction Technology 2 **Credit 2.0**
Prereq: Principles of Construction, Construction Tech 1 **Grades: 11-12**
Students will use all their knowledge and skills from previous courses to construct a home from blueprints to a finished product. This class is assisted and supported by local industry leaders and all work must meet industry standards. The course includes framing on a larger scale, plumbing, electric, HVAC, painting, cabinetry, flooring, interior trim, and every building component that goes into constructing a house. This course requires students to have a strong work ethic, strong critical thinking skills, and strong employability skills. Students will also take and pass the S/P2 safety certification exam as well as the Home Builders Institute (HBI) Carpentry/Pre-Apprentice certification exam.

Aviation Pilots

Intro to Aerospace & Aviation **Credit:1.0**
Prereq: None **Grades: 9-10**
The Intro to Aviation course provides the foundation for advanced exploration in flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible.

Intro to Unmanned Aerial Vehicles (UAV) **Credit 1.0**
Prereq: Recommended Intro to Aerospace & Aviation **Grades: 10-12**
This course is designed to prepare students for entry-level employment or continuing degrees in piloting UAV operations. Students will learn UAV flight navigation, industry laws and regulations, and safety regulations. Students are exposed to mission planning procedures and environmental and human factors involved in the UAV industry.

Aviation Ground School **Credit 2.0**
Prereq: Recommended Intro to Aerospace & Aviation, Algebra 1 **Grades: 10-12**
This course is designed to extend student interests in all aspects of aviation while preparing students to take the formal ground requisite exam for the Federal Aviation Administration (FAA) Airman Knowledge Test which is required to obtain a private pilot's license. The rigor of the course challenges students with complex aeronautical, engineering, weather, management, and judgment concepts. Rules, regulations, obligations and commitments to discipline and focus are foundational throughout the course.

Graphic Design, Printing and Imaging, & Audio/Visual Technology

Principles of Arts, Audio/Video Tech, and Communications **Credit: 1.0**
Prereq: None **Grades: 9-12**
Careers in the Arts, Audio/Video Technology, and Communications 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. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities. The class will also study the basic features of journalism, advertising, the media, and basic yearbook and/or newspaper production.

Graphic Design and Illustration 1-3 (Yearbook) **Credit: 1.0**
Prereq: Prin. Arts, A/V, & Communications, teacher approval **Grades: 10-12**
This course applies the elements and processes necessary to produce the student yearbook. It develops skills in news judgment, fact gathering, photography, headline and caption writing, graphic design and layout, proofing, and editing. The course also includes digital photography, desktop publishing, and database management. Out-of-class time is required.

Printing & Imaging Technology 1-3 (Newspaper) **Credit: 1.0**
Prereq: Prin. Arts, A/V, & Communications **Grades: 10-12**
Students will become familiar with newspaper production techniques and journalistic writing techniques to the extent that the students will write and publish a school newspaper both online and in print. Out-of-class time is required.

Mechanical & Aerospace Engineering

Principles of Applied Engineering **Credit:1.0**
Prereq: None **Grades: 9-12**
Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and will be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

Engineering Design & Presentation 1 **Credit:1.0**
Prereq: Prin. of Engineering, SR&D 1 **Grades: 10-12**
Students will design and develop a rocket to break the speed of sound, fabricating all parts from scratch except for the motor. Students will learn the history of flight and create math models of flight and travel to NASA to present to engineers. Students will demonstrate knowledge and skills of the design process as it applies to engineering fields and project management using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students will explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.

Introduction to Computer Aided Design and Drafting **Credit: 1.0**
Prereq: None **Grades: 10-11**
This course allows students to acquire knowledge and skills needed to use design software, including an introduction to CADD equipment and software selection interfaces. Students gain skills in setting up a CADD workstation and upgrading a computer to run advanced CADD software.

Intermediate CADD **Credit:1.0**
Prereq: Intro to CADD **Grades: 11-12**
Students will learn Inventor used for 3-D modelling of objects, focusing on the fundamentals of computer-aided drafting. As the year progresses there are innovative designs that students are provided for prototyping and 3D printing. Students will become contract drafters for senior program design development converting student design drawings into working drawings usable by industry to manufacture.

Career Preparation

Career Preparation 1 & 2/Extended Career Prep **Credit:2.0-3.0**
Prereq: At least 1 course in the CTE coursework **Grades: 11-12**

Career Preparation General provides opportunities for students to participate in a work-based learning environment that incorporates continuous collaborative feedback between the employer, teacher, and student. This course combines classroom instruction with business and industry employment experiences that may be outside the student's current program of study. The goal is for students to obtain entry-level employment developing a variety of skills for obtaining and maintaining employment. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. Qualifications: Students must be at least 16 years old, classified as a junior or senior, meet academic requirements, obtain an approved, paid employment or unpaid learning experience site, have reliable transportation, and work a minimum of 10 hours each week or 15 hours for extended career prep (documented weekly). In addition, the Career Preparation instructor will visit the employment site six times per school year to obtain an employer performance review of each student for grading purposes.

Career Preparation for Program of Study 1 & 2 /Extended Career Prep **Credit:2.0-3.0**
Prereq: At least 1 level 2 course in the CTE pathway **Grades: 11-12**

Career Preparation for Programs of Study provides additional opportunities for students to develop business and industry employment experiences, which must be related to the student's current program of study alongside advanced classroom instruction. The goal is to prepare students with a variety of skills to transition from job- to career-mindedness. This course provides a continuing focus on collaborative feedback between the employer, teacher, and student. Career Preparation for Programs of Study expands on Career Preparation General by increasing rigor, supporting student attainment of academic standards, and effectively preparing students for college and career success. Qualifications: Students must be at least 16 years old, classified as a junior or senior, meet academic requirements, obtain an approved, paid employment or unpaid learning experience site, have reliable transportation, and work a minimum of 10 hours each week or 15 hours for extended career prep (documented weekly). In addition, the Career Preparation instructor will visit the employment site six times per school year to obtain an employer performance review of each student for grading purposes.

Practicum/Extended Practicum in Programs of Study **Credit: 2.0-3.0**
Prereq: At least 1 level 2 course in the CTE pathway **Grades: 11-12**

Practicum courses various programs of study are designed to give students supervised practical application of knowledge and skills. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of courses in a Career Cluster. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. To prepare for careers, students must attain academic skills and knowledge, acquire technical knowledge and skills related to the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Fredericksburg ISD Dual-Credit Equivalent Table

FISD High School Course	Credit	Angelo State University Equivalent	Semester Hours
English 3 DC Fall English 3DC Spring	.5 .5	ENGL1301 Composition 1 ENGL1302 Composition 2	3 3
English 4 DC Fall English 4 DC Spring	.5 .5	ENGL2326 Introduction to American Literature ENGL2321 Introduction to British Literature	3 3
Special Topics in Social Stud. 1 US History DC	.5 1.0	HIST1301 US History to 1865 HIST1302 US History since 1865	3 3
Government DC Special Topics in Social Stud. 2 Economics DC	.5 .5 .5	POLS2305 US Government POLS2306 Texas Government ECON2301 Macroeconomics	3 3 3
Music Appreciation DC	1.0	MUSI1306 Music Appreciation (spring sem)	3
Art Appreciation DC	1.0	ARTS1301 Introduction to Art	3
Speech DC	.5	COMM 1315 Public Speaking	3
Psychology DC	.5	PSY2301 General Psychology	3