Bandera High School
Course Selection Guide



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Dear Bandera High School Students & Parents:
Please use this guide to assist you in making course selection choices for the upcoming school year. Remember to take into consideration your four-year plan and what you plan to do after high school. See a counselor for additional questions regarding course selections. Also, your classroom teachers serve as an excellent resource for advising you on suggested courses for next year in their content areas.

Please note that some courses may not be available due to staffing and availability.

Included are the current graduation requirements (Foundation Plan and Foundation Plan with Endorsements). Also, course descriptions for each department are included.

STATE GRADUATION PLAN

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 Computer Science	**2 Credits Languages other than English (LOTE)** 2 Credits in the same LOTE or 2 Computer Science
1 Credit Physical Education	**1 Credit Physical Education**
1 Credit Fine Arts	**1 Credit Fine Arts**
5 Credits Electives	**7 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 Algebra2.

ENDORSEMENTS

With the new 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 Bandera ISD, this will be accomplished during their course selection period taking place in spring during their 8th grade year. 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

Endorsement Course Sequences

The pages that follow are course programs of study in which students may choose, under each Endorsement, and the coherent course sequences.

Select the endorsement in which you are interested. You must meet prerequisites before enrolling in certain courses. **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.

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.

College, Career, and Military Prep

CCMP works to ensure that all Texas HS students have access to high quality pathways to career and college. Meeting CCMP is a requirement for graduation.

Core Courses	Pathways
ENGLISH	**Health And Wellness**
English 1 English 1 Honors	Princ Health Science
English 2 English 2 Honors	Med Term | Kinesiology 1
English 3	Anatomy/Physiciology | Kinesiology 2
English 3/4 DC(ENG1301,ENG1302)	Practicum In Health Science
British Lit DC (ENG 2301, ENG 2302)	**Education and Training**
College Prep	Principals of Human Service
MATH	Human Growth and Development
Algebra 1	Instructional Practices 1
Geometry Geometry Honors	**Practicum in Education (ELU1301, EDU 2301)**
Algebra II Algebra II Honors	**Construction**
College Alg DC (MATH1414)	Principles of Construction
Math Models	**Construction Tech 1 DC (CNBT 1400, CNBT 1450)**
Contemporary Math DC (MATH 1314)	
College Alg/Stats (MATH 1414, MATH 1342)	**Construction Tech 2 DC (m SNBT 1342, CNBT 1453)**
Col Alg./PreCal DC (MATH1414, MATH2412)	
CAL/Stats DC (MATH 2413, MATH1342)	Construction Practicum
SCIENCE	**Agricultural Mechanics**
Biology Biology Honors	Principals of AFNR
Blology DC (Bio 1406, Bio 1407)	**AG Mechanics (WLDG 1313)**
Chemistry Chemistry Honors	**Ag Structures (WLDG 1317, WLDG 1430)**
Chem DC (Chem 1305, Chem 1306)	**Ag Power (WLDG 1425, WLDG 1428)**
Physics	**Ag Science**
Physics DC(Phys 1305)	Principals of AFNR
Anatomy and Physiology	*Equine Science/*Small Animal
Forensics	Livestock Production
Advanced Animal Sci DC (AGRI 1319, AGRI 2321)	**Advanced Animal Sci DC (AGRI 1319, AGRI 2321)**
Environmental Science	**Ag Plant Science**
IPC	Principals of AFNR
SOCIAL STUDIES	Floral Design (counts as a Fine Arts credit)
World Geography World Geography Honors	Advanced Floral Design
World History **World History AP**	**Hospitality & Tourism**
US History	Principals of Hospitality & Tourism
AP US HIstory (CLEP 1301,1302)	Culinary 1
Gov/Econ	Culinary 2
GOV/Econ DC (Govt 2305, Econ 2301)	**Computer Science**
WORLD LANGUAGES	Fundamentals of Computer Science
Spanish 1 Spanish 1 Honors	**AP Computer Science Principles**
Spanish 2 Spanish 2 Honors	**AP Computer Science 2**
Spanish 3 AP	
Spanish DC (Span 1411, Span 1412)	Practicum in Entrepreneurship
PE	**Public Service**

PE	ROTC 1, 2, 3, 4
Athletics	
#Dance	**OTHER COURSES**
FINE ARTS	Debate 1 2 3 4
Art 1 Art 2 Art 3 Art 4	ACC Dec
Theatre 1 2 3 4	**AP Psych/SSRE**
Technical Theatre 1 2 3 4	Yearbook 1 2 3 4
Band	**AVID (EDUC)**
Choir	
Piano 1	
Jazz Choir #	
Jazz Band #	
Chorle#	
Music Appreciation DC	
Art Appreciation DC	
Theatre Production	
Applied Music	

*** = one semester class (.5)** **# Audition Required**
^ = has prerequisite

ENGLISH LANGUAGE ARTS

English 1 **Credit: 1.0**
Preq: 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.

English 1 Honors **Credit: 1.0**
Preq: None **Grade: 9**
This course is a study of literature and language. Critical thinking skills and analysis are emphasized in both reading and composition to begin preparing students for the Advanced Placement Test.

English 2 **Credit: 1.0**
Preq: English 1 **Grade: 10**
This course is a study of world literature and language. The relationship between historical events and their influence on literary movements, types, and techniques are emphasized. 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, persuasion, literary analysis, and research skills.

English Honors 2 **Credit: 1.0**
Preq: English 1 **Grade: 10**
This course is a study of literature and language. Critical thinking skills and analysis are emphasized in both reading and composition to begin preparing students for the Advanced Placement Test.

English 3 **Credit: 1.0**
Preq: English 2 **Grade:11**
This course is a study of American literature from its colonial roots through modern works. The relationships between historical events and their influence on literary movements, types, and techniques are emphasized. Composition includes a study of the multi-paragraph essay with emphasis on exposition, narration, persuasion, literary analysis, rhetorical analysis, and research skills.

Dual Credit English Composition (ENGL1301/ENGL1302) **Credit: 1.0**
Preq:English 2, completed ApplyTexas & Qualifying Exam Scores (TSI Test) **Grades:11-12**
This course satisfies English 3 or English 4 state requirements for graduation.
Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. Students will earn high school credit as well as college credit in English 1301 and English 1302. Students must meet all dual credit admissions requirements as set by our cooperating college. (San Antonio College). Students will earn 3 college semester hours in the fall and 3 college semester hours in the spring.

English 4 **Credit: 1.0**
Preq: English 3 **Grade: 12**
This course is a study of British literature from its Anglo-Saxon foundation through the modern period. The relationship between historical events and their influence on literary movements, types, and techniques are emphasized. Composition includes a study of the multi-paragraph essay with emphasis on exposition, narration, persuasion, literary analysis, rhetorical analysis, and research skills.

British Literature Dual Credit (ENGL 2301/2302) **Credit: 1.0**

Preq: completed ApplyTexas & Qualifying Exam Scores (TSI Test); English 3 DC (1301/1302) **Grade: 12**

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions (Eng2322).

This course fulfills the Language, Philosophy, and Culture foundational component area of the core, and addresses the following required objectives: Critical Thinking, Communication, Social Responsibility, and Personal Responsibility. A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions (Eng2323). Students will earn 3 college semester hours in the fall and 3 college semester hours in the spring.

World Geography • World Geography Honors **Credit:1.0**

Preq: None **Grades: 9-12**

The World Geography 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. The course will require students to apply skills and knowledge to content information involving different regions of the world. 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.

World History **Credit:1.0**

Preq: None **Grades: 9 -12**

This course will provide a solid understanding of world history. It will enable students to better understand and evaluate the world and time in which they live by having a fundamental understanding of the past. This course will also cover major events and trends from ancient civilizations to the Cold War era. Within this chronology, this course will look at the history of culture, politics, diplomacy, society, education, economics, and more.

AP World History **Credit:1.0**

Preq: None **Grade: 9-10**

This is a college-level course designed to teach students how to study world history as an historian would. The AP World History textbook, supplementary readings and tests are all written at the college level. The course content offers a truly global approach to world history: major cultural regions are given roughly equal weight. Students are required to do a great deal of independent learning outside of class; class time is dedicated to developing the analytical and writing skills necessary to succeed on the AP World History exam which is administered every year in May. Students are encouraged to take this exam.

U.S. History **Credit:1.0**

Preq: World Geography or World History **Grade: 11**

U.S. History is a required course for graduation. In this course, students will study the history of the United States from Reconstruction to the present. Focus will be on the political, economic, and social events related to a variety of historical events. Students are expected to interpret, analyze, and use critical thinking skills to examine historical documents and primary sources. Students will be tested on a STAAR EOC at the end of the year.

AP U.S. History **Credit:1.0**

Preq: World Geography or World History **Grade: 11**

It is highly recommended to have taken (AP)World History

Advanced Placement United States History is designed to offer a college-level experience and training for the AP Exam given each May. Analyzing documents, mastering factual information, and writing critical essays are stressed throughout the course. Emphasis will be placed on key themes mandated by the College Board such as American diversity, American identity, culture, demographic changes, economic transformations, environment, globalization, politics and citizenship, reform, religion, slavery and its legacy, and war and diplomacy. Students will be tested on a STAAR EOC.

U.S. History DC **Credit:1.0**

Preq: World Geography or History- Highly recommended to have taken (AP)World History; completed Apply Texas and qualifying TSI scores **Grade: 11**

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period and from the Civil War/Reconstruction era to the present. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Students will be tested on a STAAR EOC.

Government **Credit:0.5**

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

U.S. Government is designed to introduce students to an overview of the U.S. and Texas government according to the guidelines set by the state of Texas. Students will be required to familiarize themselves with the purpose of government, the three branches of government and increase their civic knowledge regarding their rights and responsibilities as citizens.

Government DC **Credit:0.5**

Preq: World Geography or History, U.S. History / TSI **Grade: 12**

Personal Financial Literacy & Economics **Credit:0.5**

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

The Personal Financial Literacy and Economics Course emphasizes the economic way of thinking, which serves as a framework for the personal financial decision-making opportunities introduced in the course. Students will demonstrate the ability to anticipate and address financial challenges as these challenges occur over their lifetime. In addition, students are introduced to common economic and personal financial planning terms and concepts. As a result of learning objective concepts and integrating subjective information, students gain the ability to lead productive and financially self-sufficient lives.

Economics DC **Credit:0.5**

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

Additional English and Social Studies Courses

Sociology **Credit:0.5**

Preq: Grade level requirement & World History or US History **Grades: 11-12**

This course will provide the student with a better understanding of his own behavior as well as that of others. This course provides an opportunity for the students to study elements of individual and social psychology and how the knowledge and methods of psychologists are applied to the solution of human problems.

Psychology **Credit:0.5**

Preq: Grade level requirement & World History or US History **Grades: 11-12**

This course will provide the student with a better understanding of his own behavior as well as that of others. This course provides an opportunity for the students to study elements of individual and social psychology and how the knowledge and methods of psychologists are applied to the solution of human problems.

AP Psychology **Credit:1.0**

Preq: Grade level requirement & World History or US History **Grades: 11-12**

The purpose of the AP course in Psychology is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. The aim is to provide a learning experience equivalent to that obtained in most college introductory psychology courses, and will prepare students to take the AP exam administered in May to obtain college credit.

Journalism 1 **Credit: 1.0**

Preq: None, application with advisor **Grades: 9-12**

This course is geared to the highly motivated student who desires a firm background in journalistic technique. This course covers the essential ingredients of newspaper writing including: news stories, feature, editorials, and headlines. This course will also stress the techniques of observation, interviewing, reporting, and ethics in the media. In addition, proofreading, editing, and newspaper layout will be covered.

Advanced Journalism: (Yearbook 1, 2, and 3) **Credit: 1.0**

Preq: Teacher Approval Required **Grades: 10-12**

Students will be given challenging, real world projects and rigorous assignments typical of the graphic design and publishing industries. High quality work is expected and must meet standards specified during instruction. Classroom activities will include reading, research, projects, and problem solving. Students will often work in teams, but will be expected to complete individual assignments in relation to the team's work. Assessment methods will include written exams, tests, and quizzes; reading assignments; and projects. The students will learn how to use the online yearbook production program.

- Students will be responsible for the design (production ladder, grid and modular design, font/color selection), writing (copy, captions, headlines, editing), photography (periodic after-school commitment required, quantity/quality of photos, basic photo editing skills), sales (target market, advertising, promotional material), and end-of-year distribution of the finished Bandera High School yearbook.

Debate **Credit:1.0**

Preq: Must attend Debate Summer Camp & Theatre Director's Approval **Grades: 9-12**

The preparation and delivery of debate arguments provides students with the opportunity to think critically, develop academic research skills, improve communication abilities, solve problems creatively, and increase self-confidence. It is a competitive course and students are required to attend two tournaments per semester. It also requires some supplies to be purchased. There are summer research assignments and a day camp in August.

Academic Decathlon **Credit:1.0**

Preq: Application, meeting with advisor **Grades: 9-12**

The academic decathlon course is a thematic course of study that changes from year to year. Students are provided the opportunity to learn specific materials about the topic of the year. Recent years have had topics such as India, World War II, Africa, and Innovations in Technology. The students learn to excel academically through team competition. The decathlon students will engage in challenging multidisciplinary studies, develop study skills, as well as speaking and interview skills. Although the class is centered on a theme, it is also the proving ground for those that are interested in competing in the United States Academic Decathlon contests. A team will be selected of the best students to represent the school in competition. A strong work ethic is essential for success in this class.

MATHEMATICS

Algebra 1 **Credit: 1.0**

Preq: Grade 8 math or equivalent **Grade: 9**

Algebra 1 is designed to expand the basic arithmetic skills to a more abstract level required for advanced mathematics. Topics studied include real number operations, function concepts, rational and polynomial concepts, linear functions, inequalities with one or two variables, graphs in a plane, square roots, and quadratic functions.

Geometry • Geometry Honors **Credit: 1.0**

Preq: Algebra 1 **Grades: 9-12**

This course provides a general study of plane and solid geometry. Techniques used in deductive reasoning will be introduced. Topics include Geometric properties, postulates and theorems, triangles, polygons, circles, geometric formulas, constructions, coordinate geometry, and transformations.

Mathematical Models with Applications **Credit:1.0**

Preq: Algebra 1 & Recommended Preq: 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 • Algebra 2 Honors **Credit:1.0**

Preq: Algebra 1 **Grades:10-12**

Algebra 2 is designed to increase skills in algebraic operations. Studies include the complex number system, higher-degree polynomials, and exponential and logarithmic functions, and second-degree equations, systems of linear equations, sequence and series, and application of algebraic skills through stated problems.

Pre-Calculus Dual Credit **Credit:1.0**

Preq: Alg 1, Geometry, Algebra 2; ApplyTexas & Qualifying Exam Scores (TSI Test) **Grades: 11-12**

This dual credit math course allows a student college credit as well as high school credit. It is taught at college level using college materials. This course provides the student with an understanding of a wide variety of advanced trigonometry and analytic geometry concepts and problem solving methods. (College Course Fall: Math 1414 College Algebra- 4 college credit semester hours. College Course Spring: Math 2412 Precalculus- 4 college credit semester hours.)

Calculus Dual Credit **Credit:1.0**

Preq: Pre- Calculus DC, ApplyTexas & Qualifying Exam Scores (TSI) **Grades: 11-12**

This dual credit math course allows a student college credit as well as high school credit. This course requires the ability to critically analyze a problem, make assumptions and observations, and drawing conclusions will be emphasized through topics such as functions, limits, derivatives, integrals, and their applications. This course is taught at the college level. Course is paired with Statistics DC and credit is awarded at the end of the year upon completion. (College Course: Math 2413 Calculus- 4 college credit semester hours awarded in the fall).

Statistics DC **Credit:1.0**

Preq: Algebra 2, College Algebra (MATH 1314 or 1414), qualifying TSI scores **Grades: 11-12**

This is a college level course. This course is a non-calculus introduction to statistics. Topics include the presentation and interpretation of data (using histograms and other charts, measures of location and dispersion, and exploratory data analysis), elementary probability and probability distribution functions (binomial, normal, t, chi-square), confidence intervals, hypothesis testing, correlation and linear regression, analysis of variance, and the use of statistical software.

College Algebra Dual Credit **Credit:1.0**

Preq: Algebra 1, Geometry, Algebra 2; ApplyTexas & Qualifying Exam Scores (TSI Test) **Grade: 12**

This dual credit math course allows a student college credit as well as high school credit. This course covers the in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. This course fulfills the Mathematics foundational component area of the core and addresses the following required objectives: Critical Thinking, Communication, and Empirical Quantitative Skills. (College Course Spring: Math 1314 College Algebra-students can earn 4 college credit semester hours.)

Financial Mathematics **Credit:1.0**

Preq: Algebra 1 **Grades:12**

Financial Mathematics 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. Students will focus on mathematical process standards to demonstrate an understanding of the various financial institutions and accounts; demonstrate an understanding of various types of credit; understand the cost of housing comparing home purchases and renting; and identify resources for acquiring funding for education after high school such as personal savings, employment, FAFSA, etc.

Biology 1 **Credit:1.0**
Preq: None **Grades: 9-12**
Students in Biology study a variety of topics that include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; ecosystems; plants and the environment. The student will gain experience in manipulating the conditions of a laboratory investigation and in evaluating the applications of biological principles in everyday life.

Biology1 Honors **Credit: 1.0**
Preq: None **Grades: 9-12**
Biology 1 is an intensified study of living organisms. The content is similar to Biology 1 but is more in depth and provides more analysis. The student should be able to critically assess biological information and to formulate bridges between vastly different biological phenomena. The student will study current advances and problems in biology, be able to state an informed opinion and support it with facts.

Integrated Physics & Chemistry (IPC) **Credit: 1.0**
Preq: 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.

Chemistry1 **Credit: 1.0**
Preq: 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 Honors **Credit: 1.0**
Preq: 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 Chemistry AP. 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 DC **Credit: 1.0**
Preq: Biology & Chemistry; Algebra 1 & Geometry, TSI **Grades:11-12**

Biology DC **Credit:1.0**
Preq: Biology & Chemistry 1, TSI **Grades: 11-12**

AP Physics • Physics DC **Credit: 1.0**

Preq: Biology & Algebra 1, Algebra 2; if taking Dual Credit student must have an ApplyTexas & Qualifying Exam Scores (TSI Test) & have completed PreCal DC **Grades: 11-12**

This is a college level science elective. It is highly recommended that a student have a strong mathematical background. A student taking the dual credit section of this course can earn college credit and high school credit. This course is Algebra based and is the equivalent to a first semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy and power, and mechanical waves and sound. It will also introduce electric circuits. (College Course Spring: Physics 1401-Students can earn 4 college credit semester hours.)

Anatomy and Physiology Honors **Credit:1.0**

Preq: Algebra 1; Biology & Chemistry **Grades: 11-12**

Anatomy and Physiology is a time intensive course geared for those juniors and seniors interested in pursuing higher education and careers in the medical field or biological fields. This class entails a comprehensive and detailed study of the structures and functions of the human body. The obtainable knowledge in this class will enable students to understand the medical terminology of physicians, to make informed decisions, to enhance their own health and quality of life, and to aid them in making health care decisions for themselves and their families. The laboratory section of the class requires detailed dissection of organs and animals.

Medical Microbiology **Credit: 1.0**

Preq:Biology and Chemistry **Grades:11-12**

Medical Microbiology is designed to promote an understanding of the effects of microorganisms on the human body. Students in Medical Microbiology explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, blood borne pathogens and emerging diseases. The study includes the standard precautions necessary for health maintenance and infection control. This course will focus specifically in the medical laboratory, which is important in identifying microorganisms that affect health and wellness. Students will have the opportunity to test for a phlebotomy technician. Certification as well as certification in basic life support upon successful completion of the course.

Environmental Systems **Credit: 1.0**

Preq: Biology & IPC or Chemistry **Grades: 11-12**

The goal of this science course is to provide students with the tools to understand the relationships of the natural world, to identify and analyze environmental problems, both natural and human-made, to evaluate the risks associated with these problems and to examine solutions for resolving and preventing these problems. This course is problem-based with real world connections for today's proactive student.

Forensics **Credit: 1.0**

Preq: Biology and Chemistry **Grades: 11-12**

This course uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scenes. Using scientific methods, students will collect and analyze evidence through case studies.

Advanced Plant & Soil Science **Credit:1.0**

Grades: 11-12

Preq: Biology and Chemistry/IPC/Physics & at least 1 course in the AFNR career cluster

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 other fields of science. Students will conduct laboratory and field investigations using safe, environmentally appropriate and ethical practices.

Advanced Animal Science DC **Credit: 1.0**

Preq: Biology, Algebra 1,Geometry; & IPC or Chemistry; & either **Grades: 11-12**

Small Animal Management, Equine Science, or Livestock Production; ApplyTexas & Qualifying Exam Scores (TSI Test)

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course examines the interrelatedness of human, scientific, and technological aspects of animal science through field and laboratory experiences. (College Course WLDG 1434: students can earn 4 college credit semester hours, awarded in the spring through Palo Alto Junior College)

Foreign Language

Spanish 1 **Credit:1.0**
Preq: None **Grades: 9-11**
Spanish I is the first course of a recommended two or three year sequence. It is designed to develop the fundamental language skills of listening, speaking, reading and writing. The study of vocabulary and grammar is presented in context, along with the culture of Spanish-speaking people.

Spanish 1 Honors **Credit:1.0**
Preq: None **Grades: 9-11**
Spanish I is the first course of a recommended two or three year sequence. This is a pre-advanced placement course and moves at a faster pace that Spanish 1. It is designed to develop the fundamental language skills of listening, speaking, reading and writing. The study of vocabulary and grammar is presented in context, along with the culture of Spanish-speaking people.

Spanish 2 **Credit:1.0**
Preq: Spanish 1 **Grades: 9-12**
Spanish II is the second course of the two year sequence for students. It is a continuation of the development of the fundamental language skills of listening, speaking, reading and writing with some emphasis on vocabulary and grammar. Students continue to study the culture, the people and their customs.

Spanish 2 Honors **Credit:1.0**
Preq: Spanish 1 **Grades: 9-12**
Spanish II Honors is the second course in the sequence of this foreign language. This is a pre-advanced placement course and moves at a faster pace than Spanish 2. Students will continue to refine the four skills of listening, speaking, reading and writing by being exposed to an enriched and accelerated curriculum that emphasizes developing higher levels of proficiency and a more comprehensive knowledge of vocabulary and grammar. Students continue to study the culture, the people and their customs.

Spanish 3 Honors **Credit:1.0**
Preq: Spanish 1 & 2 **Grades: 10-12**
Spanish III Honors continues the development of proficiency in all four fundamental skills. Although the study of vocabulary and grammar continues, the course concentrates on oral and written communication. The student will read and discuss a variety of cultural and literary selections and will have frequent opportunities to do independent, pair and group work.

Spanish Dual Credit **Credit:1.0**
Preq: Spanish 1&2, Apply Texas application, TSI scores on file **Grades: 9-11**
Introduction to the fundamentals of the Spanish language and culture in order to develop listening, speaking, reading, and writing skills. Students will receive 4 college credit hours (SPAN 1411 Elementary Spanish) through San Antonio College to be awarded 2nd semester upon successful completion of the course.

Spanish 4 AP **Credit:1.0**
Preq: Spanish 1, 2, & 3 **Grades: 11-12**
Spanish V AP provides the student with an additional year of college preparatory Spanish to further refine the four language skills through a variety of independent, pair and small group activities. A major objective is preparation for the Advanced Placement Language Exam as well as other college/university placement exams.

Spanish 5 AP (Literature & Culture) **Credit:1.0**
Preq: Spanish 1, 2, 3, & 4 – It is highly recommended to score at least a 3 on the Spanish AP Exam. **Grades: 11-12**
Spanish V AP provides the student with an additional year of college preparatory Spanish to further refine the four language skills through a variety of independent, pair and small group activities. A major objective is preparation for the Advanced Spanish Literature and Cultural Exam as well as other college/university placement exams.

Art 1 **Credit:1.0**
Preq: None **Grades: 9-12**
This is an introductory course for all visual arts and a prerequisite for all other art classes. This course is an introduction to the basic elements and principles of design, and materials of visual art. Students express their thoughts and ideas creatively while fostering reflective thinking and developing disciplined effort and problem-solving skills.

Art 2 **Credit:1.0**
Preq: Art 1 **Grades: 9-12**
Advanced level classes are designed for students who want to develop a more focused instruction in drawing, painting, or sculpture. The students are expected to have an understanding of the basic elements and principles of design. They will further explore technique and application of media and learn the benefits of critique and critique etiquette. Students will begin to study artists and artistic movements within culture. The Art 2 student is expected to produce advanced level artwork, meet specific deadlines, and work on multiple projects in class, as well as independent study.

Art 3 **Credit: 1.0**
Preq: Art 2 and Teacher Approval **Grades: 10-12**
Advanced level classes are designed for the serious art student who is interested in research-based projects in the areas of drawing, painting, or sculpture. The students should have an advanced knowledge of the elements and principles of design. They will continue to perfect their technique and application of media, critique and critique etiquette. Students will continue to study artists and artistic movements within culture. The Art 3 student is expected to produce advanced, professional level artwork, meet specific deadlines, and work on multiple projects in class, as well as independent study.

Art 4 **Credit: 1.0**
Preq: Art 3 and teacher approved **Grades: 11-12**
Advanced level classes are designed for the serious art student who is interested in research-based projects in the areas of drawing, painting, or sculpture. The students should have an advanced knowledge of the elements and principles of design. They will continue to perfect their technique and application of media, critique and critique etiquette. Students will continue to study artists and artistic movements within culture. The Art 4 student is expected to produce advanced, professional level artwork, meet specific deadlines, and work on multiple projects in class, as well as independent study.

Music Appreciation Dual Credit **Credit:1.0**
Preq: must have an ApplyTexas & Qualifying Exam Scores (TSI Test) **Grades: 9-12**
Learn about the wide variety of music in our world. Study about composers and their works, music of other cultures, and the various forms and styles of American music, including serious composition, the American musical, jazz, and rock. College credit is awarded in the spring through San Antonio College.

Applied Music **Credit:1.0**
Preq: Concurrent registration in band **Grades: 9-12**
Applied music is a band director guided and self-guided enrichment course for band members on their respective instruments. Involved are one-on-one lessons format with band directors, as well as larger ensemble activities. Band members that enroll in this course are expected to participate in All-Region band auditions, as well as utilize SmartMusic practice software.

Band 1-4 **Credit:1.0**

Preq: Band Director's Approval **Grades: 9-12**

The fall semester of this course emphasizes the simultaneous coordination of physical movement with instrumental performance; the spring semester emphasizes concert performance. The organization actively participates in University Interscholastic League contests including Marching, Concert and Sight Reading, and Solo and Ensemble and the Association of Texas Small School Bands all-state band audition process. Other performance opportunities include various community parades, pep rallies, football halftime shows and concerts. Rehearsal begins approximately the first week in August prior to the start of each school year. After marching season, auditions are held for placement into one of two concert bands. Counts as PE credit - fall semester only.

Jazz Band **Credit:1.0**

Preq: Band Director's Approval **Grades: 9-12**

Band program with emphasis on jazz. All students in the program will be a member of the High School Band program except those students playing guitar, bass guitar, and piano. All students must audition with the band staff.

Choir 1-4 **Credit:1.0**

Preq: None for Choir 1 **Grades: 9-12**

Choir stresses basic skills in proper vocal production and music reading. Membership in this organization provides an opportunity for the student to develop personal strengths and positive attitudes toward ensemble participation through the learning of both popular and serious music. Students will perform in several concerts throughout the year.

Chorale **Credit:1.0**

Preq: Audition and Choir Director's Approval **Grade 9-12**

The students in this organization will be freshmen (with director approval), sophomore, junior, and senior girls. Membership is gained only through an audition process.

Jazz Choir 1-4 **Credit:1.0**

Preq: Audition and Choir Director's Approval **Grades 9-12**

Jazz Choir is a small group choir made up of male and female students who perform Jazz/Pop music alone and with the Jazz Band. Membership in this group is gained only through an audition process.

Piano 1-4 **Credit:1.0**

Preq: None **Grades: 9-12**

This course is designed to teach basic music theory concepts and fundamentals needed to perform on the piano. It will increase musical understanding by teaching chords and keys, accompaniment patterns, and improvisational techniques. We will delve into music at its source, find how music is constructed, and discover composers and history behind the music. Through the use of basic computer music programs students will have the opportunity to explore basic music technology and its applications to composition, arrangement, and music recording techniques. Instruments: Digital Piano Keyboards and Headphones will be provided by the school to use during class.

Floral Design **Credit:1.0**

Preq: Grade Level Requirement **Grades: 10-12**

To be prepared for careers in floral design, students need to attain academic skills and knowledge as well as technical knowledge and skills related to horticultural systems and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply and transfer their knowledge and skills and technologies in a variety of settings. This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

Theatre Arts 1-4 **Credit:1.0**

Preq: None **Grades: 9-12**

This course presents an overview of theater arts. The first semester concentrates on performing techniques, improvisations, voice, oral interpretation, play interpretation, structure, and performance. Members of this class will produce a short play that includes all facets of theater study. The second semester will focus on the historical development of drama and its impact on today's theater with emphasis on independent student research. Preparation and perfection of duets, improvisations, and interpretation pieces are part of the ongoing performance opportunities this semester. Two main stage performances are available to Theatre I.

Technical Theatre **Credit:1.0**

Preq: Theater 1 and Director's Approval **Grades: 9-12**

This course is designed for students who wish to be involved in theater without actual performance requirements. Technical theater is a hands-on class where students will learn to build sets and props, paint scenery, create sound tracks and handle lights for theater productions.

Theatre Production 1-4 **Credit:1.0**

Preq: Audition, Theater 1, Director's Approval **Grades: 9-12**

This is an in-depth study of performance theater covering acting, directing, make-up, costuming, publicity, lighting, and sound. This is an advanced specialization course. The course includes competition one-act play.

Musical Technology

Credit:1.0

Grades: 9-12

Music technology class will give students the opportunity to learn the basic skills and understanding of computer music technology and its uses in the general audio and visual marketplace. Students will explore how to create music for various marketplace purposes, learn about various types of careers in music technology, put together and effectively run a basic sound system, and have the opportunity to collaborate with other BISD programs.

Physical Education/Athletics & Health

Lifetime Fitness &WellnessPursuits(PE) (Girls/Boy) **Credit:1.0**

Preq: None **Grades: 9-12**

The basic purpose of this course is to motivate students to strive for lifetime personal fitness with an emphasis on the health-related components of physical fitness. The knowledge and skills taught in this course include teaching students about the process of becoming fit as well as achieving some degree of fitness within the class.

Boys Athletics **Credit:1.0**

Preq: Will need to complete a physical **Grades: 9-12**

Competitive Sports: Numerous athletic programs under UIL affiliation are offered for students in high school. Students who participate in athletics may earn a maximum of two state units and 2 elective units in physical education. Prospective athletes wishing to compete in any sport must have permission from the head coach of the sport of their choice.

Girls Athletics **Credit:1.0**

Preq: Will need to complete a physical **Grades 9-12**

Competitive Sports: Numerous athletic programs under UIL affiliation are offered for students in high school. Students who participate in athletics may earn a maximum of two state units and 2 elective units in physical education. Prospective athletes wishing to compete in any sport must have permission from the head coach of the sport of their choice.

Career and Technical Education Courses

Health Science

Principles of Health Science **Credit:1.0**

Preq: none **Level 1**

The Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry.

Medical Terminology **Credit:1.0**

Preq: Level 1 **Level 2** This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

Anatomy and Physiology **Credit:1.0**

Preq: Algebra 1; Biology & Chemistry **Level 3**

Anatomy and Physiology is a time intensive course geared for those juniors and seniors interested in pursuing higher education and careers in the medical field or biological fields. This class entails a comprehensive and detailed study of the structures and functions of the human body. The obtainable knowledge in this class will enable students to understand the medical terminology of physicians, to make informed decisions, to enhance their own health and quality of life, and to aid them in making health care decisions for themselves and their families. The laboratory section of the class requires detailed dissection of organs and animals.

Practicum in Health Science **Credit: 2**

Preq: Anatomy and and Biology **Level 4**

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

Principles of Health Science **Credit:1.0**

Preq: none **Level 1**

The Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry.

Kinesiology 1 **Credit:1.0**

Preq: Prin. of Health Science **Level 2**

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, the history of kinesiology, and the psychological impact of sports and athletic performance.

Kinesiology 2 **Credit:1.0**

Preq: Kinesiology 1 **Level 3**

Must have prior approval from the instructor. This course is designed to provide students with 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.

Practicum in Health Science **Credit: 2**

Preq: Kinesiology 2 and Biology **Level 4**

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.

Education and Career Training

Principles of Human Services **Credit:1.0**

Preq: None **Level 1**

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

Human Growth and Development **Credit:1.0**

Preq: Prin. of Human Services **Level 2**

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

Instructional Practices 1 **Credit:2.0**

Preq: Prin. of Education or Human Services, Human Growth & Development **Level 3**

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

Practicum in Education and Training **Credit: 2.0 Preq:**

Instructional Practices and Human Growth and Development **Level 4**

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.

Public Service

ROTC 1-4 **Credit 1.0**

Preq: None **Grades 9-12**

The NJROTC program mission is to instill in students in United States secondary educational institutions the values of citizenship, service to the United States, personal responsibility, and a sense of accomplishment.

The NJROTC curriculum emphasizes citizenship and leadership development, as well as our maritime heritage, the significance of sea power, and naval topics such as the fundamentals of naval operations, seamanship, navigation, and meteorology (for a more complete list of topics, see the navigation buttons above). Classroom instruction is augmented throughout the year by community service projects, drill competition, field meets, visits to naval activities, marksmanship training, and other military training. Uniforms and textbooks are provided. One elective credit is granted for completion of two full semesters. *1st year can satisfy 1 PE requirement.

Business & Industry

Culinary Arts

Introduction to Culinary Arts **Credit:1.0**

Preq: Prin. of Human Services **Level 1**

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. **Students are required to take and pass the Servsafe Food Safety certification.**

Culinary Arts 1 **Credit:2.0**

Preq: Prin. of Hospitality & Tourism/Human Services, Intro to Culinary Arts **Level 2**

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. **Students are required to take and pass the Servsafe Manager Food Safety certification along with two evening catering events.**

Culinary Arts 2 **Credit: 2.0**

Preq: Culinary Arts 1 **Level 3**

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. **Students are required to take and pass the Servsafe Manager Food Safety certification along with two evening catering events.**

Practicum in Entrepreneurship **Credit: 2**

Preq: Culinary Arts 1 & 2 **Level 4**

Practicum in Entrepreneurship is a series of dynamic activities that focus on the customer to generate a profitable exchange. Students will gain knowledge and skills that help them to be proficient in one or more of the marketing functional areas associated with distribution, financing, marketing information management, pricing, product planning, promotion, purchasing, risk management, and selling skills. Students will integrate skills from academic subjects, information technology, interpersonal communication, and management training to make responsible decisions. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical courses.

Business and Industry

Agriculture, Food, and Natural Resources

Animal Science

Principles of Agriculture, Food, and Natural Resources (AFNR) Credit: 1.0

Preq: None **Level 1**

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

Equine Science Credit:0.5

Preq: None **Level 2**

To be prepared for careers in the field of animal science, students need to enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. Suggested animals which may be included in the course of study include, but are not limited to, horses, donkeys, and mules. **This course is part of a yearly rotation with Livestock Production.**

Small Animal Management Credit: 0.5

Preq: None **Level 2**

To be prepared for careers in the field of animal science, students need to enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. Suggested small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats. **This course is part of a yearly rotation with Livestock Production.**

Livestock Production Credit:1.0

Preq: None **Level 3**

To be prepared in careers in the field of animal science, students need to 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. Animal species to be addressed in this course may include, but are not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry. **This course is part of a yearly rotation with Equine Science/Small Animal Management.**

Advanced Animal Science DC **Credit: 1.0**

Preq: Biology, Algebra 1,Geometry; & IPC or Chemistry; & either **Level 4**

Small Animal Management, Equine Science, or Livestock Production; ApplyTexas & Qualifying Exam Scores (TSI Test)

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course examines the interrelatedness of human, scientific, and technological aspects of animal science through field and laboratory experiences. (College Course WLDG 1434: students can earn 4 college credit semester hours, awarded in the spring through Palo Alto Junior College)

Practicum in AFNR **Credit: 2.0**

Preq: AFNR and a coherent sequence of courses in AFNR **Level 5**

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

Plant Science

Principles of Agriculture, Food, and Natural Resources (AFNR) Credit: 1.0

Preq: None **Level 1**

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

Floral Design Credit:1.0

Preq: AFNR **Level 2**

To be prepared for careers in floral design, students need to attain academic skills and knowledge as well as technical knowledge and skills related to horticultural systems and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply and transfer their knowledge and skills and technologies in a variety of settings. This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

Advanced Floral Design Credit:1.0

Preq: Floral Design, Grade Level Requirement **Level 3**

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.

Advanced Plant and Soil Credit: 1.0

Preq: Adv. Floral **Level 4**

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

Practicum in AFNR Credit: 2.0

Preq: AFNR and a coherent sequence of courses in AFNR **Level 5**

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

Business and Industry
Applied Agricultural Engineering

Principles of Agriculture, Food, and Natural Resources (AFNR) **Credit: 1.0**

Preq: None **Level 1**

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

Agricultural Mechanics and Metal Technology **Credit:1.0**

Preq: None **Level 2**

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

Ag Structures Design and Fabrication **Credit: 1.0**

Preq: Ag Mechanics and Metal Technology **Level 3**

To be prepared for careers in mechanized agriculture and technical systems, students attain knowledge and skills related to agricultural facilities design and fabrication. Students explore career opportunities, entry requirements, and industry expectations. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

Agricultural Power Systems DC **Credit: 2.0**

Preq: Ag Mech and Metal Technology, ApplyTexas application, TSI scores on file. **Level 4**

To be prepared for careers in agricultural power, structural, and technical systems, students should attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations. To prepare for success, students should have opportunities to learn, reinforce, apply, and transfer their knowledge and technical skills in a variety of settings. This course is designed to develop an understanding of power and control systems as related to energy sources, small and large power systems, and agricultural machinery. (College Course WLDG 1434: students can earn 4 college credit semester hours, awarded in the spring through Palo Alto Junior College)

Practicum in AFNR **Credit: 2.0**

Preq: AFNR and a coherent sequence of courses in AFNR **Level 5**

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

Business and Industry

Architecture and Construction

Principles of Construction **Credit:1.0**

Preq: None **Level 1**

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 DC **Credit 2.0**

Preq: Principles of Construction & TSI **Level 2**

In Construction Technology I, students will gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in safety, tool usage, building materials, codes, and framing.

Construction Technology 2 **Credit 2.0**

Preq: Construction Tech 1 & TSI **Level 3**

In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills.

Practicum in Construction Technology **Credit: 2.0**

Preq: Construction Technology 2 **Level 4**

In Practicum in Construction Technology, students will be challenged with the application of knowledge and skills gained in previous construction-related coursework. In many cases students will be allowed to work at a job (paid or unpaid) outside of school or be involved in local projects the school has approved for this class.

Computer Science

Fundamentals of Computer Science — Credit:1.0

Preq: None — **Level 1**

This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, including AP Computer Science Principles and AP Computer Science LOTE/MATH courses.

AP Computer Science Principles — Credit:1.0

Preq: Algebra 1; Fund. Comp. Sci. recommended — **Level 2**

Through the study of technology applications foundations, including technology-related terms, concepts, and data input strategies; students learn to make informed decisions about technologies and their applications. The efficient acquisition of information includes the identification of task requirements; the plans for using search strategies; and the use of technology to access, analyze, and evaluate the acquired information. By using technology as a tool that supports the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create a solution, and evaluate the results. Students communicate information in different formats and to diverse audiences. A variety of technologies and programming languages will be used, including Scratch, Processing, Python, Arduino, and JAVA. Students will analyze and evaluate the results.

AP Computer Science 2 — Credit:1.0

Preq: AP Computer Science 1 — **Level 3**

Computer science embraces problem solving, hardware, algorithms and perspectives that help people utilize computers to solve real-world problems in everyday life. The AP Computer Science A course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design. These techniques represent proven approaches for development solutions that can scale up from small, simple problems to large, complex problems.

***AP Computer Science Principles and AP Computer Science MATH/LOTE are used to fulfill the Foreign Language requirement.**

Project-Based Research — Credit: 2.0

Preq: AP Computer Science 2 — **Level 4**

The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

Bandera ISD Dual-Credit Equivalent Table

BISD High School Course	HS Credit	Alamo College Course	Semester Hours
College Alg.l DC (Fall Sem) PreCal DC (Spring Sem)	.5 .5	MATH1414 College Algebra – PreCal Track MATH2412 Precalculus	4 4
Calculus/Stats DC (Credits awarded at end of year.)	2.0	MATH2413 Calculus (fall semester) MATH1342 Statistical Methods (spring semester)	4 3
Ind. Study in Math DC	1.0	MATH1314 College Algebra – non-PreCal (spring sem)	4
English 3/4 DC Fall English 3/4 DC Spring	.5 .5	ENGL1301 Composition 1 ENGL1302 Composition 2	3 3
English 4 DC British Lit Fall English 4 DC British Lit Spring	.5 .5	ENGL2322 British Literature 1 ENGL2323 British Literature 2	3 3
Physics 1 DC	.5	PHYS1401 General Physics (spring sem)	4
Advanced Animal Science DC	1.0	AGRI 1319 Animal Science (fall sem) AGRI 2321 Livestock Evaluation 1 (spring sem)	3 3
Ag Powers (Welding) DC	1.0	AGRI 2301 Agriculture Power Units (fall sem) AGRI 2303 Agriculture Construction (spring sem)	3 3
Music Appreciation DC	.5	MUSI1306 Music Appreciation (spring sem)	3
Spanish DC	1.0	SPAN 1411 Elementary Spanish 1 (fall sem) SPAN 1412 Elementary Spanish 2 (spring sem)	3 3
Biology DC	.5 .5	Bio 1406 (fall semester) Bio 1407 (spring semester)	4 4
Government DC (Fall) Economics DC (Spring)	.5 .5		3 3

Bandera ISD Certification Opportunites

BHS School Course	Certification Available
Prin. Health./Human Growth	CPR/First Aide
Kinesiology	Personal trainer/CPR/First Aide
Culinary 1/2	ServeSafe Food Handlers/Manager
Ag Mech/Ag Power Systems	AWS Certification/Drone
Floral Design/Adv. Floral	TSFA Level 1/2, Benz School of Floral Design Principles of Floral Design