Hereford High School
Course Description

2023-2024

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General Information

This information is designed to assist students and parents in planning course selections for all four years in high school. Courses are offered in a wide variety of areas for high school students. Each course is described along with the specific prerequisites to help in selection of appropriate courses. Course selection and planning for the high school years result in educational decisions that involve the student, parents, counselor, and teachers. In working out a program, you should plan for your four years in high school. Long-range goals to get a job, to attend a community college, or to go to a four-year college should be established. The program should be based on these goals. In addition to the district graduation requirements, you should check for additional requirements necessary to meet these goals.
For current high school students that plan to attend a four-year college, Advanced Placement and Honors classes should be considered. If your intention is to go to work following high school or to enter Technology training at a community college or private school, you should select courses with a concentration in an area of particular career interest and include as many courses as you can in preparation for your chosen career.

Take some time and use this information as your guide to planning your four-year school program.
It is the policy of Hereford ISD not to discriminate on the basis of sex, handicap, race, color, or national origin in its educational programs, services, and activities and in its employment practices as required by Title VI of the Civil Rights Act o 1964, as amended Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1073, as amended and the Age Discrimination Act of 1975, as amended.

Five-Year Graduation Plans

The Student's graduation plan is prepared during the 8th grade in cooperation with the student, parent, teachers, and counselor. It should be the guide for selecting courses to be taken in high school. The student needs to review the graduation plan annually and make adjustments prior to selecting courses for the next year.

Course Selection and Registration

After developing a list of courses for the next school year with school personnel, the student is required to review the list with parents. Counselors and/or faculty will counsel and advise students in making selections.

Course Availability

Availability of any course depends upon sufficient enrollment, personnel, and other resources. <u>All courses listed may not be offered every year</u>.

Changing Courses

The courses that are requested by students in the spring help determine the master schedule. By completing the registration process, students are agreeing to attend those classes. Students are welcome to alter selections for the fall semester until classes start in August, but must follow their schedule when school begins. Schedule changes will be considered during the first week of each semester. This deadline is necessary because course offerings, teacher assignments, and class schedules are based upon student requests.

Credits

In subjects that are one-semester courses only, one-half credit shall be awarded if a student earns a grade of 70 or above. In subjects that are full-year courses, one credit shall be awarded at the end of the school year if the student passes both semesters or if the average of the two semesters is 70 or above.

Classifications

Less than 7 credits = 9th grade
7-12.5 credits = 10th grade
13-16.5 credits = 11th grade
17+ credits = 12th grade

Alternative Credits

Correspondence and online courses: These courses must be from approved institutions, such as the Texas Virtual School Network. (The Texas Virtual School Network provides online courses and instruction.) Courses have to be approved by the counselor and principal. Credits earned by correspondence or Credit by Exam do not meet the "core course" requirements set by the NCAA Clearinghouse and are not used to calculate grade point averages.

Credit by Exam: Students may use credit by exam to demonstrate mastery to earn credit in academic courses at the secondary level, with prior approval of the principal. A registration process is required. Credit by exam without prior instruction requires a grade of a least 80% to earn credit. Credit by Exam with prior instruction requires a grade of a least 70% to earn credit. The students must have earned a grade of at least a 60 in the course failed in order to gain credit. Credit by exam cannot be used to gain eligibility for participation in extracurricular activities. Additional information on credit by exam is available in the counselor's office. Credits earned by exam are not used to calculate grade point averages.

Dual Credit

Dual credit refers to the practice of awarding credit at two educational institutions for a course completed at one institution. HISD and Amarillo College have entered into an agreement to award dual credit for specific courses. Amarillo College does the enrollment for the dual credit courses in Hereford. All students must meet eligibility requirements to be eligible to enroll in a college course and make an application to Amarillo College. The grade earned in the course is entered on their college transcript. An "Incomplete" or failing grade in a dual credit course affects a student's ability to receive federal financial aid for college until 12 hours of college coursework is successfully completed. The student must be enrolled in a total of 5 courses (full-time student) in order to be enrolled in dual credit classes. College hours can also be earned from certain approved high school CTE courses.

Advanced Placement Program

The Advanced Placement (AP) Program is a cooperative educational endeavor between secondary schools and colleges and universities. Hereford ISD's Advanced Placement Program includes Honors courses designed to help prepare students for Advanced Placement courses. This program exposes high school students to college-level material through involvement in AP courses. Students have an opportunity to show that they have mastered the objectives of the AP course by taking an AP Exam. Colleges and

universities can then grant credit, placement, or both to students who demonstrate mastery on an AP Exam. It is the expectation of Hereford High that students enrolled in AP courses will take the AP Exam. Colleges and university policies regarding Advanced Placement grades vary. Students seeking college credit through AP are advised to obtain the college's AP policy in writing or to look for it in the institution's catalog. Questions to ask include: What placement, exemption, and credit are granted for satisfactory performance on an AP Exam. What minimum AP Exam grades qualifies for this treatment? Is there any other requirement to receive credit and/or placement? AP Exams are a significant part of the AP Program, but they are not the only part. AP courses lay the groundwork for students to succeed on the exams. Students can benefit from taking Honors courses by learning a subject in greater depth, developing skills that will be critically important to successful college and work force experience, and demonstrating to colleges and potential employers their willingness to undertake challenging courses.

The Advanced Placement Program is open to all students. A student's participation in a Honors or AP course is a decision that should be based on the level of preparation for the course, willingness and ability to meet its academic challenges, and the level of support from family and friends. Students may enroll in as many AP courses as desired. Students identified as GT are strongly advised to enroll in Honors and AP courses.

STAAR – State of Texas Assessments of Academic Readiness

End of course (EOC) assessments will be administered in Algebra I, Biology, English I, English II, and US History. To receive a diploma, a student must achieve a score in each foundation content area (English, Mathematics, Science, and Social Studies) that indicates satisfactory performance. More information can be found at www.tea.us.state.tx

Graduating Class Recognition

The top 5% will be recognized as Summa Cum Laude, the top 10% recognized as Magna Cum Laude, and the top 15% as Cum Laude. The top ranking student will receive scholarships from the State of Texas.

Loss of Credit

A student may not be given credit for a class if the student does not attend the class a minimum of 90% of the instructional days during a semester. Notice will be given when attendance falls below requirements. The student may petition the attendance committee to award credit. The committee shall review the student's attendance records and the reasons for absences and shall determine whether to award credit.

Planning Information for "Life After High School"
Two- And Four- Year Colleges

Getting Ready for College

1. Select high school courses that are appropriate for your chosen program type. The college websites will list recommended or required high school courses, whether you need to take SAT and/or ACT, and if there is a minimum score. Also, find out what majors are offered.
2. Develop good study and organizational skills.

3. Be serious about grades throughout school. THEY ARE IMPORTANT! They will affect college acceptance and scholarship eligibility.
4. Learn more about your aptitudes by taking the ASVAB (Armed Services Vocational Aptitude Battery), and various computer exploration programs.
5. Register for and take the PSAT/NMSQT in October of your junior year. This test is the only way to qualify for the National Merit Scholarships. (You may want to take it for practice in your sophomore year.)
6. Visit college campuses during the summer and other vacation times.
7. Keep records of honors, activities, leadership positions, etc. beginning your freshman year.
8. Take SAT and/or ACT during the spring of your junior year so that you will have the opportunity to retake it if necessary.
9. Get to know your high school counselor. The counseling center has numerous sources of information, and your counselor is a valuable resource in obtaining information about college admissions and financial aid.

Steps in Applying for College

1. Choose a college. Consider size, location, cost, admission requirements, course of study, family tradition, physical facilities, extracurricular activities, honors programs, transfer of credits, etc. It is strongly recommended that you visit college campuses before finalizing your decision.
2. Obtain applications: a) admissions; b) housing; c) financial aid.
3. Meet admission requirements: a) grades; b) testing.
4. File applications:
   a) If an essay is required, use correct spelling and punctuation. Make the best impression possible.
   b) Housing- usually requires a deposit and at some universities, on-campus housing is limited. Be aware of any deadlines for housing applications.
   c) Financial aid forms must be accurate, and complete.
5. Meet all deadlines. It is a good idea to mark these on your calendar.
6. Keep a record of all correspondence with the college.
7. Sign and return the letter of financial offers.
8. Request a final transcript from your high school registrar. This final Academic Achievement Record will have a state seal.

Trade and Technical Schools and Junior/Community Colleges

Who Should Attend

1. Students who want to obtain a marketable skill in two years or less.
2. Students seeking an economical alternative to the basic courses of a four-year degree.

Admission Requirements

The first requirement for admission to most schools is a desire to learn. Generally, accredited private trade and technical schools and junior colleges require a high school diploma or GED. For some trade and technical schools, work experience may help to waive that requirement. In addition, some schools require certain placement tests given on their own campuses as a screening process for specific programs.

How To Choose A School

The best way to check out a school is to visit it. Choose a day when classes are in session. Talk to students to see if they are happy with their training. Look around at the buildings and equipment to see

how they compare with the catalog description. If possible, talk to graduates to see what they think of the school.

Trade and technical schools emphasize placement of their graduates. Because the reputation of a good placement rate is essential for a school to thrive year after year, be sure to get information about the placement rate.

Expenses

The cost of attending a junior or community college is minimal. Tuition at the trade and technical schools will vary according to the programs offered. Financial aid is available at the junior colleges, as well as the trade and technical schools.

Admission to Selective Colleges and Military Academies

High School seniors who graduate in the top ten percent of their class will be automatically admitted to Texas public universities and colleges, if they apply within two years of their high school graduation, pending approval of continued funding by the state legislature. The University of Texas accepts a smaller percentage that is determined the year prior to graduation.

Selective colleges include those that admit less than one-third of their applicants. Included in the list of colleges with the most selective admission procedures are: Amherst; Cornell; Princeton; *U.S. Air Force Academy; Brown; Dartmouth; Rice; *U.S. Coast Guard Academy; California Institute of Technology; Duke; Stanford; *U.S. Military Academy; Harvard; University of Pennsylvania; *U.S. Naval Academy; Columbia; MIT; Yale; and Trinity.

*Also requires a congressional nomination. Should begin application by the spring of junior year.

Specific factors which selective colleges look at in making decisions include:

I. Personal Application
   - A. High school courses – 4 years English; 4 years math; at least 2 years foreign language; 4 years science.
   - B. Test scores – SAT and ACT scores well above average.
   - C. Background data – Number of schools attended, parents' colleges and career, and personal factors.
   - D. Degree selection
   - E. Extracurricular activities – Admissions directors look for in-depth commitment and leadership positions, not just a long list of activities. Service academies look for participation in sports.
   - F. Community involvement - Volunteer work, scouts, church.
   - G. Work experience.
   - H. Personal statements or essays.
   - I. Class rank – Top quarter or higher.

II. Recommendations – Most of these colleges require two or three recommendations from a counselor, teacher, and one other person. To facilitate the process, the student might furnish each with a synopsis of his/her activities, and major interests, goals, and background.

III. Interviews – Many colleges require interviews on campus or with representatives of colleges in the student's community.

To enhance one's chances of admission to these colleges, preparation for admission should begin no later than the freshman year. Students should be encouraged to take a rigorous college-preparatory program and to become involved in extracurricular activities. Parents should also make sure the student is interested in and would feel comfortable at these schools. It is advised that you take advantage of vacations to visit colleges and/or regions of the country you are considering.

Financial Aid

If meeting the cost of a college education is a problem for you and your family, money is available from several sources, including state and federal governments, private sources, such as corporations or unions, and colleges. The first step for financial aid is completing the FAFSA. Colleges use this to determine need for financial assistance. This assistance may be in the form of:

1. Scholarships – These vary in amount and are awarded on the basis of achievement, talent, and personal qualities. Scholarships are gifts and do not have to be repaid.
2. Grants – These vary in amount and are awarded to students based on financial need and ability to maintain satisfactory progress in a course of study. Grants are gifts and do not have to be repaid.
3. Jobs/Work Study – Schools may offer employment on the campus through various work programs, or they may have a placement service to help you find a job in the community.
4. Loans – Educational loans are available to qualifying students, usually at low-interest rates, and must be repaid after graduation.

To gain more information, see your school counselor and check the counselor web page frequently. Changes are constantly being made in financial aid, especially in government programs; therefore, it is also a good idea to consult references such as the Minnie Stevens Piper Compendium of Texas Colleges and Financial Aid Calendar and Need a LIFT.

Applications for scholarships and other financial aid are to be made during the student's senior year. Many of these optimal deadlines are in early spring. Meeting all deadlines and providing accurate and complete information is very important.

Resource Websites

College Board - PSAT, SAT, Advanced Placement, CLEP, Scholarship Information
http://www.collegeboard.com

ACT Exam
http://www.act.org

Common Application to Texas Public Universities
http://www.applytexas.org

Scholarship Information
www.herefordisd.net
http://www.collegechannel.com
http://www.collegequest.com
http://www.fastweb.com
http://www.embark.com

Financial Aid Information
http://www.fafsa.ed.gov
http://www.finaid.org
http://www.salliemae.com
http://www.collegefortexans.com

Course Descriptions
Academic Courses

English Language Arts

Completion of four credits of English is a state requirement for graduation.
* College level course

English I, II, III, IV
Grades: 9-12 Credits: 1

These courses offer students enrolled in the high school program opportunities to read a wide range of literary selections and to develop skills in literature, reading, writing, and language concepts. To meet graduation requirements, students must pass the English I and II STAAR End of Course tests.

English I, II, III, IV Advanced
Grades: 9-12 Credits: 1

These courses offer the highly motivated student enrolled in the advanced high school program opportunities to develop higher skills in literature, reading, writing and language concepts. The advanced courses give students a solid background for pursuing a college education. To meet graduation requirements, students must pass the English I and II STAAR End of Course tests.

English I, II Honors
Grades: 9-10 Credits: 1

These courses offer highly motivated students enrolled in the advanced high school honors program opportunities to develop critical thinking skills in literature, composition, reading, and language, and to prepare for English III AP and IV AP. To meet graduation requirements, students must pass the English I and II STAAR End of Course tests.

English III AP
(AP English Language)
Grades: 11 Credits: 1

This course offers highly motivated students enrolled in the advanced high school honors program opportunities to develop critical thinking skills in literature, composition, reading, and language, and to prepare for English IV AP. Students may receive college credit through high scores on the AP English Language Exam. Taking the AP exam is optional.

English IV AP/Dual Credit*
(AP English Literature)
Grades: 12 Credits: 1

This course offers highly motivated students opportunities to develop critical thinking skills in literature, composition, reading, and language, and to prepare for college-level English. Students may receive college credit through dual credit enrollment and/or scores on the AP Literature exam.

Business English
Grades: 12 Credit: 1

Students explore effective communication, collaboration, teamwork, and the importance of a positive, productive work ethic. Students will demonstrate these skills and attributes by creating and/or participating in classroom and workplace scenarios that highlight integrity, professionalism, ways to improve communication, and teamwork.

College Preparation English
Grades: 12 Credits: 0

College Preparation English is designed to prepare students to meet the college readiness requirements of post-secondary education.

Oral Interpretation I-III, Advanced
Grades: 9-12 Credits: ½ - 1

These courses offer students opportunities to explore and understand literary works. Students will study the role of the interpreter, select, analyze, and adapt literature. Students will perform in competition.

Debate I, II, III-Advanced
Grades: 9-12 Credits: ½ - 1

These courses will provide students opportunities to examine the structure of debates and apply their abilities of reading, writing, listening, and analyzing debates. Students will debate in competition.

Yearbook

Yearbook I (Desktop Publishing)
Grades: 10-12 Credits: 1

AN APPLICATION MUST BE TURNED IN DURING SPRING AND APPROVAL BY ADVISOR MUST BE RECEIVED BEFORE TAKING CLASS.

The high school yearbook is published.

1. Students take digital pictures.
2. Students plan and design pages. This includes cropping pictures, writing copy, writing headlines, and writing captions.
3. Students sell advertising to business in the community and attend a yearbook workshop during the summer.
4. Students sell yearbooks during the school year.
5. Students host KOOBRAEY, which is a money making project, during the spring semester.
6. Students work on a time deadline.

Yearbook II
Grades: 10-12 Credits: 1
Prerequisite: Yearbook Production I

AN APPLICATION MUST BE TURNED IN DURING SPRING AND APPROVAL BY ADVISOR MUST BE RECEIVED BEFORE TAKING CLASS.

The ultimate goal of the class is publication of the high school yearbook. Second year students are in charge of different sections of the yearbook and help first year students plan their pages.

Yearbook III

Grades: 11-12 Credits: 1
Prerequisite: Yearbook Production I, II

AN APPLICATION MUST BE TURNED IN DURING SPRING AND APPROVAL BY ADVISOR MUST BE RECEIVED BEFORE TAKING CLASS.

The ultimate goal of the class is publication of the high school yearbook. In addition to the duties listed in Yearbook I and II, the 3rd year students work as editors or business managers. Third year students proof read pages and show how corrections should be made. Third year students must assist Yearbook I and II students.

Mathematics

Pre-Algebra

Grade: 9 Credits: 1 Local credit

Pre-Algebra is a yearlong course that prepares students to enter the study of Algebra I. The focus of the course is building the foundation necessary for success in the study of Algebra. Pre-Algebra will help students be more successful on the STAAR Algebra End of Course test needed to meet graduation requirements.

Algebra I

Grades: 9-12 Credits: 1

Study of functions with emphasis on analyzing relationships using a variety of representations including concrete models, algebraic methods, and the graphing calculator. Students must pass the STAAR End of Course test to meet graduation requirements.

Geometry

Grades: 9-12 Credits: 1

Introduction and basics of plane, solid, and coordinate geometry. Stresses geometric knowledge of physical space, deductive and inductive reasoning, and the integration of geometry and algebra.

Geometry Honors

Grades: 9-10 Credits: 1
Prerequisite: Algebra 1

Introduction and basics of plane, solid, and coordinate geometry. Stresses geometric knowledge of physical space, deductive and inductive reasoning, and the integration of geometry and algebra. Geometry Honors is an accelerated course.

Math Models with Applications

Grades: 11-12 Credits: 1

Focus on statistics, algebra, geometry, and math of finance with emphasis on using technology to solve applied problems. If selected, must be taken prior to Algebra II.

Algebra II

Grades: 10-12 Credits: 1
Prerequisite: Algebra 1

Designed to prepare students for higher-level math through study of equations, inequalities, and functions. Both algebraic and graphic methods are used in problem solving. Some key topics include Linear Equations and Inequalities, Matrices, Quadratic Functions, Radical, Inverse Functions, Exponential and Logarithmic Functions, Rational Expressions and Functions, and Polynomial Functions.

Algebra II Honors

Grades: 10-12 Credits: 1
Prerequisite: Algebra 1

Designed to prepare students for higher-level math through study of equations, inequalities, and functions. Both algebraic and graphic methods are used in problem solving. Some key topics include Linear Equations and Inequalities, Matrices, Quadratic Functions, Radical, Inverse Functions, Exponential and Logarithmic Functions, Rational Expressions and Functions, and Polynomial Functions. Algebra II Honors is an accelerated course.

Intermediate Algebra – Independent Study in Mathematics

Grade: 11-12 Credits: 1

This course is designed to strengthen students' math skills to meet the demands of college math. For these reasons the curriculum will follow the objectives of college algebra, but will allow a pace more conducive to the needs of the student. Students will extend their mathematical understanding beyond the Algebra II level.

Pre-Calculus Dual Credit*

Grades: 11-12 Credits: 1
Prerequisite: Algebra II Honors, Pre-Calculus, Intermediate Algebra

Academically rigorous course requiring daily preparation. Students enrolled in dual credit should have good algebra skills and be willing to utilize those skills to explore new topics that will prepare them for Calculus. The primary focus of this course is the study of functions, including trigonometric functions and their applications. Upon completing this course, students should be well prepared for taking AP Calculus or most college level mathematics courses.
*To receive dual credit, student must meet Amarillo College requirements and enroll through Amarillo College.

Pre-Calculus

Grades: 11-12 Credits: 1
Prerequisite: Algebra II

Academically rigorous course requiring daily preparation. Students enrolled in Pre-Cal should have good algebra skills and be willing to utilize those skills to explore new topics that will prepare them for Calculus. The primary focus of this course is the study of functions, including trigonometric functions and

their applications. Upon completing this course, students should be well prepared for taking AP Calculus or most college level mathematics courses.

Calculus AP*

Grades: 12 Credits: 1
Prerequisite: Pre-Calculus Dual Credit

This course covers functions, limits, derivatives, and integrals. Topics viewed geometrically, numerically, and algebraically. Students may earn credit for one semester of college calculus with qualifying AP exam scores.
*College level course.

Science

Biology I

Grades: 9-12 Credits: 1

This course is the study of our living world. In the first semester students will study cells, genetics, and ecology. The second semester covers the six kingdoms and human biology. Students participate in many labs and animal dissections. Students must pass the STAAR End of Course test to meet graduation requirements.

Biology I Honors

Grades: 9-12 Credits: 1

This course is designed for the college bound student. Students will be expected to work hard and the Biology I-Advanced curriculum will be expanded in order to prepare the student for college. Students must pass the STAAR End of Course test to meet graduation requirements.

Integrated Physics and Chemistry

Grades: 9-12 Credits: 1

This course is an introduction to Physics and Chemistry through classwork and lab experiments. This course is not offered to students with credit in Chemistry or Physics.

Chemistry

Grades: 10-12 Credits: 1

Prerequisite: One credit of high school science and Algebra I
Chemistry I is the study of the structure of the matter, the transformation and interactions of mater and energy.

Chemistry Honors

Grades: 10-12 Credits: 1

The Honors course offers the same general curriculum as Chemistry I. However, topics are covered more in-depth. A strong math background is a must! This class moves at a faster pace.

Physics

Grades: 10-12 Credits: 1
Prerequisites: Algebra II, Geometry, and Pre-Cal would be helpful.

Physics is the study of matter and energy and its interrelationship with everyday life.

Anatomy and Physiology

Grades: 11-12 Credits: 1

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Topics will be presented through an integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems and will investigate the body's responses to forces, maintenance of homeostasis, electrical interactions, transport systems, and energy systems.
The course must include at least 40% laboratory investigation and fieldwork using appropriate scientific inquiry. This course meets the requirements for the 4th science credit.

Environmental Systems

Grades: 10-12 Credits: 1

In Environmental Systems, students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: biotic and abiotic factors in habitats; ecosystems and biomes; interrelationships among resources and an environmental system; sources and flow of energy through an environmental system; relationship between carrying capacity and changes in populations and ecosystems; and changes in environments.

Principles of Technology

Grades: 11-12 Credits: 1

Principles of Technology is a course in applied science that is designed to prepare students more effectively for the advances in technology. It uniquely teaches traditional physics concepts in the context of their relationship to the four energy systems: mechanical, fluid, electrical, and thermal. Emphasis is placed on hands on activities, creative thinking and problem solving, while having fun learning.

Forensic Science

Grades: 11-12 Credits: 1

Forensic Science is a course focusing on the drive to unlock the mystery of crimes through the application of science. This course will complement the curriculums of criminal justice, biology, and chemistry courses, and will involve the study of both historical and modern crimes. Forensic Science is designed to provide students with an introductory understanding of criminology and the processes by which criminologists use the scientific method to analyze data as evidence. Knowledge and skills will be gained in hair/fiber analysis, blood type analysis, bloodstain patterns, DNA, anthropology (skeletal analysis), fingerprint comparison, toxicology (drug and poison analysis), etc. However, course content will be flexible and based on student interest and/or current events. Forensics is a CTE course in the Law, Public Safety, and Corrections and Security Cluster.

Advanced Animal Science

Grade: 11-12 Credits: 1
Prerequisite: Minimum of 1 credit from any Agriculture, Food, and Natural Resources cluster:
(This fulfills the fourth science requirement).

This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

Biology II AP/DC 1st Semester

Grades: 12 Credits: .5 HS and 4 credit hours of college biology (Biology 1406)
Prerequisites: Biology I Advanced or Honors, Chemistry, Algebra I, and English I & II

The Advanced Placement/Dual Credit Biology course is designed to be the equivalent of the college introductory biology course taken by students majoring in science. The primary topics and concepts covered will be focused on physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts including cytology, reproduction and scientific reasoning are emphasized. Laboratory activities are also a key component.

Biology II AP/DC 2nd Semester

Grades: 12 Credits: .5 HS and 4 credit hours of college biology (Biology 1407)
Prerequisites: Biology I Advanced or Honors, Chemistry, Algebra I, and English I & II.

The Advanced Placement/Dual Credit Biology course is designed to be the equivalent of the college introductory biology course taken by students majoring in science. The topics and concepts covered will be diversity and classification of life including animals, plants, protists, fungi and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

Social Studies

World Geography

Grades: 9-12 Credits: 1

This course will provide students the opportunity to examine physical and cultural geography, explain geographical terminology, study the physical setting of the earth, the interaction of physical environments, and urban analysis.

World Geography Honors

Grades: 9 -12 Credits: 1

This course will provide students the opportunity to examine physical and cultural geography, explain geographical terminology, study the physical setting of the earth, the interaction of physical environments, and urban analysis. The advanced course will also include an in depth study of the different cultures around the world and their effects on world events. Because of the advanced nature of this course, students may be required to complete outside reading assignments prior to and during the school year in which they are enrolled.

World Geography AP*

Grades: 9-12 Credits: 1
Prerequisites: Parent / Guardian Approval

This course will provide a rigorous conceptual study of patterns and processes that have shaped the physical and human world. This advanced course will also include an in depth study of the different cultures around the world and their effects on world events. This course prepares the student to take the Advanced Placement examination and may be used to fulfill the World Geography Studies requirement for graduation. Because of the advanced nature of this course, students will be required to complete multiple outside reading and project assignments during the school year.

World History

Grades: 10-12 Credits: 1

World History is the study of the world from prehistoric man to the modern world. Its major premise is that man can learn to solve modern day problems by studying the past. Topics of study include: prehistoric man, the Greeks, the Romans, the Middle Ages, the Renaissance, the Reformation, the development of nationalism and nation states, World War I, World War II, with emphasis on how history has caused or could solve problems of the modern world.

World History Honors

Grades: 10-12 Credits: 1

World History is the study of the world from prehistoric man to the modern world. Its major premise is that man can learn to solve modern day problems by studying the past. Topics of study include: prehistoric man, the Greeks, the Romans, the Middle Ages, the Renaissance, the Reformation, the development of nationalism and nation states, World War I, World War II, with emphasis on how history has caused or could solve problems of the modern world. This course has an emphasis on research and primary sources.

U.S. History

Grades: 11-12 Credits: 1

United States History is the study of the historical development of the United States. Its major premise is that a study of a nation's past will give students an understanding of the democratic ideas which were developed in America and that these understandings will help the students to better solve the problems of America. The course of study begins with the period of Reconstruction following the Civil War and concludes with modern day America. Students must pass the STAAR End of Course test to meet graduation requirements.

U.S. History Advanced

Grades: 11-12 Credits: 1

United States History Advanced is a survey of United States History from 1865 to the present. The focus of the class is on evaluation and analysis of major concepts, issues, and personages that have forged our history. The premise of the course is the development of critical thinking skills that are so important in providing a true understanding of the forces that have shaped America. Students must pass the STAAR End of Course test to meet graduation requirements.

U.S. History AP/Dual Credit*

Grades: 11-12 Credits: 1

United States History Advanced is a college level survey of United States History from 1603 to the present. The focus of the class is on evaluation and analysis of major concepts, issues, and personages that have forged our history. The premise of the course is the development of critical thinking skills which are so important in providing a true understanding of the forces which have shaped America. *To receive dual credit, students must meet College Board requirements and enroll through Amarillo College. Because of the collegiate nature of this course, students will be required to complete outside reading assignments prior to and during the school year in which they are enrolled. Students must pass the STAAR End of Course test to meet graduation requirements.

U.S. Government

Grades: 11-12 Credits: ½

This course is an attempt to convey basic knowledge and understanding of our American Government principles and ideas to the student. The course will include a story of powers, duties, and responsibilities of the Executive, Legislative, and Judicial branches. Local government will be studied of the types of city and county governments and how they operate to serve the people

U.S. Government AP*/Dual Credit

Grades: 11-12 Credits: ½

A college level course in U.S. Government intended to give students an analytical perspective on government and politics in the United States. The course will include the study of the Constitutional underpinnings of democracy, political beliefs and behaviors, political parties and interest groups, the Congress, the presidency, the Federal Courts, and civil liberties. It involves the study of concepts used to interpret U.S. politics and the analysis of specific case studies. *To receive dual credit, student must meet College Board requirements and enroll through Amarillo College.

Economics

Grades: 11-12 Credits: ½

This course will be a study of the American economics systems which is characterized by the private ownership of the means of production and distribution of goods and services. Topics of study include the profit motive, competition, and the roles of business, labor, government, and the consumer in the Free Enterprise System.

Economics AP*/Dual Credit

Grades: 11-12 Credits: ½

Macroeconomics- The purpose of this college level course is to give the student a thorough understanding of the principles of economics that apply to an economic system as a whole. Areas of emphasis will include: national income and price determination (aggregate supply and demand, Keynesian V. Classical Economics theories, circular flow of goods and earnings), measurement of economic performance (GNP, costs of inflation, unemployment), international economics (exchange rates, balance of payments.) *To receive dual credit, students must meet College Board requirements and enroll through Amarillo College.

Psychology
Grades: 11-12 Credits: ½

In Psychology, an elective course, students consider the development of the individual and the personality. The study of psychology is based on an historical framework and relies on effective collection and analysis of data. Students study topics such as theories of human development, personality, motivation, and learning. (Does not replace one of the four core social studies courses.)

Sociology
Grades: 11-12 Credits: ½

In sociology, an elective course, students study dynamics and models of individual and group relationships. Students study topics such as the history and systems of sociology, cultural and social norms, social institutions, and mass communication. (Does not replace one of the four core social studies courses.)

Social Studies Research Methods
Grades: 9-12 Credits: ½

In the Social Studies Research Method, an elective course, students conduct advanced research on selected topics in social studies using qualitative and quantitative methods of inquiry.

Special Topics in Social Studies
Grades: 9-12 Credits: ½ - 1

In Special Topics in Social Studies, an elective course, comparable to the former Advanced Social Science Problems, students are provided the opportunity to apply the knowledge and skills of the social sciences to a variety of topics and issues. Students use critical thinking skills to locate, analyze, and use data collected from a variety of sources. Problem solving and decision-making are important elements of the course as is the communication of information in written, oral, and visual forms. Topics vary by semester to coincide with UIL Academics topics as well as History Fair topics.

Ethnic Studies: Mexican American Studies
Grades 10-12 Credits: 1

In Ethnic Studies: Mexican American Studies, an elective course, students learn about the history and cultural contributions of Mexican Americans. Students explore history and culture from an interdisciplinary perspective. The course emphasizes events in the 20th and 21st centuries, but students will also engage with events prior to the 20th century.

Physical Education/Athletics

A student must complete 1 credit (2 semesters). Individual students may receive a physical education waiver by participating in one of the alternative programs given below. Students who discontinue an alternative program must enroll in PE

1. Students participating in the high school marching band, girls drill team, JROTC, or varsity cheerleading can satisfy one-half credit of the physical education requirements for each semester they successfully complete one of these courses.

2. Students enrolled in boys' or girls' athletics can satisfy one-half credit of the physical education requirements for each semester of athletics that is passed.

Physical Education

Grade: 9-12 Credits: ½ -1

This course is a co-educational course designed to develop an awareness of physical fitness as a constant way of life and to make students aware of the importance of sportsmanship, maturity, and responsibility in work as well as in play. The course offers an opportunity to learn some of the basic skills in team sports such as basketball, volleyball, soccer, softball, floor hockey and flag football. Individual and dual sports such as tennis, badminton, and pickle ball are also offered. These sports contribute to developing physical fitness and movement skills, creating better mental and emotional health, and fostering a wise use of leisure time.

Athletics

Grades: 9-12 Credits: 1

Athletics is a voluntary elective that is offered to those students who can excel in some physical activity and who have a desire to compete on the interschool basis.
Athletics offers an opportunity to learn some practical lessons of life and tests one's capacity to function as a citizen in society through such sports as football, cross country, basketball, track, baseball, softball, volleyball, golf, tennis, and wrestling. All athletes must have written approval of the athletic director and the head coach of each sport. Before and after school workouts will be required at specific times of the year. A grade of 70 must be maintained in every class in order to participate in interscholastic competitions.

Student Leadership Organization

MCJROTC

MCJROTC, Marine Corps Junior Reserve Officers Training Corps, a student professional organization that provides opportunities for leadership development, knowledge and skill recognition through competitive events, and community service projects. Leadership training is provided through curriculum activities in which students learn to conduct various activities. Citizenship and patriotism are an integral part of this program.

Course Objectives

Course Objective: The Marine Corps Junior Reserve Officer Training Corps (MCJROTC) is a four-year academic program. Enrollment does not obligate a student to join the Marine Corps or any other branch of the service. Cadets, however, must accept Marine Corps standards of discipline, appearance and training. It is a nationally recognized program that has received accreditation by The Commission on International and Trans-Regional Accreditation (CITA). The primary purpose of the MCJROTC Program is Leadership Education. It prepares high school students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. In order to be a good leader, one must first learn to be a good follower. As a cadet gains experience and knowledge, he or she will be given active, hands-on leadership responsibilities within the JROTC Program.
The Marine Corps JROTC Leadership Education Program emphasizes the Marine Corp values of honor, courage, and commitment as well as development of self-discipline, leadership, integrity, and the value of community service. Citizenship training is emphasized throughout the program and reinforced by using current events and activities occurring in the Deaf Smith County area, the state of Texas, our nation and

the entire world. In addition, students are acquainted with basic military skills and Marine Corps traditions.

The success each student achieves while in the Marine Corps JROTC Program depends to a large extent on their willingness to get involved and participate in the program. Satisfactory performance within the program will result in the cadet receiving passing grades during the academic reporting period. However, since the MCJROTC Program is structured to function much like a military organization, there will also be opportunities for cadets to develop leadership skills and to progress in rank.

Promotions, especially those to the senior enlisted and officer rank, are based on a cadet's overall performance and their demonstrated capability to assume greater responsibility. A great deal is expected from the cadets promoted to leadership positions. Cadets who accept top-level promotions also accept the additional duties and responsibilities that go along with the promotion. Conversely, top-level promotions may be rescinded if a cadet, once promoted and assigned to a leadership position, demonstrates that he/she is incapable or unwilling to put forth the time and effort to successfully meet the obligations of the grade and billet assigned.

Program Goals are to:

- Develop leadership and build character.
- Create informed, patriotic, and responsible citizens.
- Develop responsible young adults who are physically, mentally, and morally fit.
- Develop informed and civic-minded young adults prepared for higher education, civilian careers, and public service.
- Instill discipline, respect, and responsibility through military-related subjects and activities.

JROTC*

Grades: 9-12 Credits: 1**

Prerequisites: Sign the Statement of Understanding

Introduces the cadet to the challenges of Marine Corps traditions of Military Courtesy, Customs and Marine Corps history. Other subjects include: first aide, leadership development, weapons safety, and physical fitness. All cadets must wear the uniform weekly and comply with the grooming standards of this course. The extra curriculum activities include the following teams: Color Guard, Drill Team, Physical Fitness, and Marksmanship.

JROTC II*

Grades: 10-12 Credits: 1**

Prerequisites: Attain the rank of Cadet Lance Corporal, complete JROTC I, and approval of the SMI prior to reenrollment.

Introduces returning cadet with the leadership challenge as a platoon leader, platoon sergeant, or squad leader. The cadet will apply those leadership skills necessary to effectively fill these leadership billets. The extra curriculum activities include the following teams: Color Guard, Drill Team, Physical Fitness, and Marksmanship.

JROTC III*

Grade: 11-12 Credits: 1**

Prerequisites: Attain the rank of Cadet Sergeant, complete JROTC II, and approval of the SMI prior to reenrollment.

Introduces the retuning cadet with the leadership challenge as the company commander, company executive officer, company first sergeant, company gunnery sergeant or the other duties supporting the company. The cadet will apply those leadership skills necessary to effectively fill these leadership

billets. The extra curriculum activities include the following teams: Color Guard, Drill Team, Physical Fitness, and Marksmanship.

JROTC IV*

Grade: 12 Credits: 1**
Prerequisites: Attain the rank of Cadet Staff Sergeant or above, complete JROTC III, and approval of the SMI prior to reenrollment.

Introduces a returning cadet with the leadership challenge as battalion commander, battalion executive officer, battalion sergeant major, battalion supply officer or other duties supporting the battalion. The cadet will apply those leadership skills necessary to effectively fill these leadership billets.
The extra curriculum activities include the following teams: Color Guard, Drill Team, Physical Fitness, and Marksmanship.

*MCJROTC Curriculum is accredited by the CITA.
**Each course of study is a one-year course.

Hope Squad

Grades 9-12

The Hope Squad is a peer-to-peer suicide prevention program whose members strive to create a safe school environment, promote connectedness, support anti-bullying, encourage mental wellness, and reduce mental health stigma. The class will serve, plan and implement activities that will support the Hope Squad program. This is a leadership class and these activities may take place in school or in the community. You can expect to gain experience in speaking, planning, and leadership, as well as any other practical life skills. After completing the course, you may request a letter of recommendation from your teacher and Ms. Riesenberg, which can be accessed when you are ready to apply for colleges or scholarships.

Fine Arts

One credit of Fine Arts is required for graduation on all graduation plans.
Students can choose from courses in art, choir, band, or theater arts to meet the fine arts requirement.

Art I

Grades: 9-12 Credits: 1

Art I includes reading and writing assignments as well as hands-on projects. The first semester of Art I introduces the students to drawing and color study using the elements and principles of design.
The second semester includes the study of drawing and color, study of painting, printing, and 3-dimensional studies (sculpture, ceramics, and fibers). Art history/appreciation will also be linked with each credit.

Art II

Grades: 10-12 Credits: 1
Prerequisite: Art I

Art II includes reading and writing assignments as well as hands-on projects. The first semester of Art II is designed to continue a sequential study of drawing and painting. Formal compositions will be

completed in realistic, abstract, and nonobjective studies. Studies will build upon skills learned in Art I in sculpture, ceramics, and fibers. Art history/appreciation will be an integral part of each study.

Art III & IV

Grades: 10-12 Credits: 1
Prerequisite: Art II

Art III and Art IV include reading and writing assignments as well as hands-on projects. The first semester will provide in-depth studies in drawing and painting. Drawing studies will emphasize advanced drawing techniques; painting emphasis will be on technique of acrylics, watercolor, and mixed media. The second semester studies include continued painting techniques, advanced printmaking, crafts, sculpture, and ceramics. Ceramics and sculpture will emphasize complex hand building techniques. Art history/appreciation will be an integral part of each study.
The difference between Art III and Art IV is the years of experience and the level of complexity the student should show in their work.

Theatre Arts I

Grades 9-12

Theatre arts is a survey course of the theatre, it's history and an in class introduction to drama. The students will study all facets of theatre and will be required to attend at least one play during the course. Students are expected to pay for their own theatre tickets.

Theatre Arts II

Grades 10-12
Prerequisite: Theatre Arts I

Theatre Arts II is where the fun begins. It is a continuation of what was previously learned in Theatre Arts I, but in this class we will begin to compile our knowledge into building a show and performing in the spring.

Technical Theatre I-IV

Grades 10-12
Prerequisite: Completion or enrollment in Theatre Arts I

Technical theatre is a hands-on course that introduces students to what goes on behind the scenes of theatrical productions. Students will be learning stage safety, set design, lighting design, costume design, sound design, and stage management while contributing to theatre productions throughout the year. Students will also participate in the UIL Theatrical Design contest beginning in the fall and finishing up in the spring.

Theatre Productions I-IV

Grades 10-12
Prerequisite: Audition, Director Permission

Theatre Productions focuses on the performance side of the theatrical spectrum. Students enrolled in the course will learn advanced acting techniques, makeup, hair, the basics of directing, and will take an active role in at least 2 productions throughout the year. After school rehearsals will be required.

Music

The music curriculum is designed to develop the student's aesthetic and cultural awareness as well as to enhance his/her skill and poise as a performer. Each course emphasizes an understanding of fundamental musicianship skills. Each course is also designed to provide a student with the necessary tools for musical performance. Some activities may require personal expense. The director/teacher of the program will furnish specific details upon request.

Band: Marching, Honor, Symphonic, and Concert

Grades: 9-12 Credits: 1
Prerequisite: Instructor's Approval

The Hereford High School Mighty Maroon Band offers training to students with previous band experience. The MARCHING BAND appears at football games, parades, and attends UIL Marching Contests/Festivals. After the football season is over the band will be divided into HONOR, SYMPHONIC and CONCERT bands. Selection to these bands will be determined by audition and one's good standing in the Band. The bands will perform concerts and attend UILconcert and sight Reading contests. Students can participate in solo and ensemble contests and the all-region, and all-state band process. Band is the foundation of school spirit and pride at Hereford High School.

Band Color Guard

The Color Guard is an important part of the Mighty Maroon Band. All color guard members are chosen by a slate of judges including the band directors during the spring semester. All members must be enrolled in the Hereford band program during the time of tryouts or commit to signing up for the class the following fall semester. The color guard's performing season coincides with the marching band season.

Hereford High School Show Choir – *LEGACY*

Grades: 10-12 Credits: 1

Prerequisite: Open audition / Director selections / instrumental skills helpful but not necessary.
Maximum student participants: 12-14 and equally divided into male and female members if possible.

Students must be willing to spend more than just regular class time practicing for performances. Attendance at all extra rehearsals and performances is mandatory. Student performance is mandatory at all HHS concert events. This choir is for 10th, 11th, and 12th grade choir students (depending on numbers, 9th grade students may be considered) - auditioned group with rehearsals outside of the school day. This is our traveling group! This group will be held to very high standards both in the classroom and out. Most of all, this is a FUN, extra time for students who really love choir. You must audition with Ms. Porter to add this class to your schedule.

Women's Choir

This choir is for 9th and 10th Grade girls - auditioned with prior experience preferred but not absolutely required. The repertoire is for two and three part treble choirs (Soprano 1/Soprano 2/Alto), and we continue to build foundational singing skills, music literacy, audience etiquette, and performance practice. This choir develops even further the skills learned in junior high choir, preparing students to continue in their vocal development through high school. Along with concert performances, Concert Choir members will have the opportunity to compete in two individual extra-curricular singing competitions: All-Region

Choirs (fall) and UIL Solo and Ensemble (spring). We will also compete at the UIL Concert and Sight-Reading Contest (spring).

Mixed Varsity Choir

This Choir will focus on adapting to the rigor of choral singing at the high school level. This choir is for all advanced musicians. Students will be auditioned with prior experience preferred but not absolutely required. The repertoire is for four to eight voice parts, depending on numbers. (Soprano 1/Soprano 2/Alto 1, Alto 2, Tenor 1, Tenor 2, Bass 1, Bass 2), and we continue to build foundational singing skills, music literacy, audience etiquette, and performance practice. Along with concert performances, Concert Choir members will have the opportunity to compete in two individual extra-curricular singing competitions: All-Region Choirs (fall) and UIL Solo and Ensemble (spring). We will also compete at the UIL Concert and Sight-Reading Contest (spring). Varsity Choir will be the face of the Hereford HS choirs and will be held to very high standards both in the classroom and out.

Any activity detrimental to the positive direction of the group will be cause for dismissal from the Choir. You must actively work and sing everyday.

Foreign Language

Two credits of foreign language are required for the Foundations Graduation Plan and three credits for the Distinguished Graduation Plan.
*College level course.

Spanish l

Grades: 9-12 Credits: 1

Spanish I is a beginner's course in basic, elementary, and fundamental Spanish. This course emphasizes grammar, verb conjugation, vocabulary, sentence structure, and oral pronunciation of the language. It also includes oral drilling with Spanish dialogs, conversational practice, and written exercises.

Spanish l Honors

Grades: 9-12 Credits: 1

Spanish I is a beginner's course in basic, elementary, and fundamental Spanish. This course emphasizes grammar, verb conjugation, vocabulary, sentence structure, and oral pronunciation of the language. Students must expect written and oral projects outside of class. This is very rigorous course designed to be taken by students desiring to complete the Spanish AP/Dual Credit course sequence.

Spanish II

Grades: 9-12 Credits: 1
Prerequisites: Spanish I

In Spanish II, students continue their learning of Spanish through communications, culture, connection, and comparisons to other languages, and the extension of languages into the community.

Spanish II Honors

Grades: 9-12 Credits: 1

Spanish II is a continuation of Spanish I on a more intermediate level with a greater emphasis on grammar, verb conjugation, vocabulary sentence structure, oral pronunciation, and drilling. More

reading and translation, and oral communication are included on this level. “Cultural Bits” of Spain and Latin America are surveyed and studied. This course is the prerequisite for Spanish III AP-Dual Credit.

Spanish III AP/Dual Credit*

Grades: 10-12 Credits: 1

Spanish III is a continuation of Spanish II on a more advanced level. This class will be an advanced placement course. Emphasis will be on communication in oral Spanish, written proficiency, and the study of prose and poetry of Hispanic authors. Cultural awareness study will be continued. This course can be taken for dual credit though Amarillo College for a total of 8 college hours.
*To receive dual credit, student must meet College Board requirements and enroll through Amarillo College

Special Topics in Language and Culture

Grades 10-12. Credits: 1
This course cannot be considered a part of the coherent sequence of languages other than English (LOTE) courses required for any endorsement. This course will not count as a level II LOTE course. The study of world languages is an essential part of education. In the 21st century language classroom, students gain an understanding of two basic aspects of human existence: the nature of communication and the complexity of culture. Students become aware of multiple perspectives and means of expression, which lead to an appreciation of difference and diversity. Further benefits of foreign language study include stronger cognitive development, increased creativity, and divergent thinking. Students who effectively communicate in more than one language, with an appropriate understanding of cultural context, are globally literate and possess the attributes of successful participants in the world community.

Hereford ISD
Career and Technical Education
Course Guide 2022-2023

CTE Vision Statement:

Our goal is to empower all CTE Students to confidently and successfully transition into post-secondary and career opportunities and become positive, contributing members of society.

CTE Mission Statement:

CTE prepares students for career pathways in the global marketplace by offering experiential learning, post-secondary credits and industry certifications. Students will gain technical and high-level academic skills, equipping them to be lifelong learners.

Hereford ISD Career and Technical Education

Non-Discrimination Statement:

Hereford Independent School District does not discriminate on the basis of race, religion, color, national origin, sex, age or disability in providing education services, activities, and programs, including vocational programs, in accordance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments of 1972; and section 504 of the Rehabilitation Act of 1973, as amended.

Programs of Study

Agriculture, Food, and Natural Resources

Architecture and Construction.

Arts, Audio Visual Technology, and Communications

Business, Marketing, and Finance

Education and Training

Health Science

Hospitality and Tourism.

Human Services

Information Technology.

Law and Public Service

Manufacturing

Science, Technology, Engineering, and Mathematics

Transportation, Distribution, and Logistic

Agribusiness Program of Study

Principles of Agriculture Level 1
Grades: 9 -12 Credits: 1

This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations within the field Agriculture, Food, & Natural Resources. The course includes soils, plants, animals, agriculture construction, food science, supervised agricultural experience programs, and leadership.

Professional Standards in Agribusiness Level 2
Grades: 10-12 Credit: ½

This course primarily focuses on leadership, communication, employer- employee relations, and problem solving as they relate to agribusiness.

Professional Communications (Speech) Level 2
Grades: 9-12 Credits: 1/2

Professional communications blends written, oral, and graphic communications in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral, and written communications. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research. The course will also 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.

Agribusiness Management and Marketing Level 3
Grades: 10-12 Credits: 1

This course is designed to provide a foundation to agribusiness management and the free enterprise system. Instructions include the use of economic principles such as supply and demand, budgeting, record keeping, finance, risk management, business law, marketing, and career in agribusiness.

Practicum in Agriculture, Food, and Natural Resources, Extended Practicum Level 4
Grades: 12 Credits: 2-3
Prerequisite: Minimum of 1 Credit from any Agriculture, Food & Natural Resources cluster.

The practicum is designed to give students supervised practical application of knowledge and skills. Experiences can occur in a variety of locations appropriate to the course work. Generally, a hands-on laboratory setting. Examples include but are not limited to the Meats Lab or Welding Shop.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Ag with Extended Practicum in Ag

Animal Science Program of Study

Principles of Agriculture (8th Grade) Level 1
Grades: 8-12 Credits: 1

This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations within the field Agriculture, Food, & Natural Resources. The course includes soils, plants, animals, agriculture construction, food science, supervised agricultural experience programs, and leadership.

Livestock Production Level 1
Grades: 9-12 Credits: 1
Recommended Prerequisite: Principles of Agriculture

This course will allow the student to be prepared for careers in the field of Animal Science. Students will acquire knowledge & skills related to animal systems and the workplace, and develop knowledge & skills regarding career opportunities. Animal species to be studied in this course may include but are not limited to, beef cattle, dairy cattle, swine, sheep, goats & poultry.

Veterinary Medical Applications Level 2
Grades: 10-12 Credits: 1
Recommended Prerequisite: Livestock Production

Course work is designed to train students for careers in the Animal Science industry or higher education. Topics covered in this course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

Advanced Animal Science / DC Level 4
Grade: 12 Credits: 1
Recommended Prerequisite: Minimum of 1 credit from any Agriculture, Food, and Natural Resources cluster: (This fulfills the third or fourth science requirement).

This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

Practicum in Agriculture, Food, and Natural Resources, Extended Practicum (Level 3 First Year Level 4 Second Year)
Grades: 11-12 Credits: 2-3
Prerequisite: Minimum of 1 Credit from any Agriculture, Food & Natural Resources cluster.

The practicum is designed to give students supervised practical application of knowledge and skills. Experiences can occur in a variety of locations appropriate to the course work. Generally, a hands-on laboratory setting. Examples include but are not limited to the Meats Lab or Welding Shop.

Project-Based Research
Grades:11-12 Credit: 1

Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Students may substitute Practicum in Ag with Extended Practicum in Ag

Food Science and Technology Program of Study

Principles of Agriculture (8th Grade) Level 1
Grades: 8-12 Credits: 1

This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations within the field Agriculture, Food, & Natural Resources. The course includes soils, plants, animals, agriculture construction, food science, supervised agricultural experience programs, and leadership.

Food Technology and Safety Level 1
Grades: 9 -12 Credits: 1
Recommended Prerequisite: Principles of Agriculture

This course examines the food technology industry as it relates to food production, handling, and safety. It will prepare students for careers in food processing systems, 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 Level 2
Grades: 10-12 Credits: 2
Recommended Prerequisite: Food Technology and Safety

This course focuses on the food processing industry with special emphasis on the handling, processing, and marketing of food products.

Practicum in Agriculture, Food, and Natural Resources 1 Level 3
Grades: 11 Credits: 2
Prerequisite: Minimum of 1 Credit from any Agriculture, Food & Natural Resources cluster.

The practicum is designed to give students supervised practical application of knowledge and skills. Experiences can occur in a variety of locations appropriate to the course work. Generally hands on laboratory setting. Examples include but are not limited to the Meats Lab or Welding Shop.

Practicum in Agriculture, Food, and Natural Resources 2 Level 4
Grades: 12 Credits: 3
Prerequisite: Minimum of 1 Credit from any Agriculture, Food & Natural Resources cluster.

The practicum is designed to give students supervised practical application of knowledge and skills. Experiences can occur in a variety of locations appropriate to the course work.

OR

Project-Based Research Level 4
Grades:11-12 Credit: 1

Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Students may substitute Practicum in Ag with Extended Practicum in Ag

Carpentry Program of Study

Principles of Construction Level 1
Grades: 9-12 Credits: 1

The course Principles Construction provides an overview of the various fields of architecture, interior design, construction science, and construction technology. The class is a good starting point for anyone interested in wood-working or carpentry. Decision making and problem solving is a basic part of this class with much of the time spent in a hands-on lab setting. Students use self-knowledge, educational, and career information to set and achieve realistic career and educational goals.

Construction Technology 1 Level 2
Grades: 10-12 Credits: 2
Recommended Prerequisites: Algebra I and Principles of Architecture & Construction

Construction Management 1 is a hands-on class using labs and actual building experiences, students gain knowledge and skills specific to those needed to enter the workforce as carpenters or building maintenance supervisors or build a foundation toward a postsecondary degree in architecture, construction science, drafting, or engineering.

Construction Technology 2 Level 3
Grades: 11-12 Credits: 2
Prerequisite: Construction Management

Construction Management 2 is a hands-on class using labs and actual building experiences, students gain knowledge and skills specific to those needed to enter the workforce as carpenters or building maintenance supervisors or build a foundation toward a postsecondary degree in architecture, construction science, drafting, or engineering. Construction Management includes the knowledge of the design, techniques, and tools related to the management of architectural and engineering projects.

Practicum of Construction Technology Level 4
Grades: 12 Credits: 2
Prerequisites: Advanced Construction Management.

In Mill and Cabinetmaking Technology, students gain knowledge and skills specific to those needed to enter the workforce in the area of millwork and cabinet manufacturing and installation. The student may also apply these skills to professions in carpentry or building maintenance supervision or use the skills as a foundation for a postsecondary degree in construction management, architecture, or engineering.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Construction with Extended Practicum in Construction

Graphic Design and Multimedia Arts Program of Study

Digital Media Level 1
Grades: 9 Credits: 1

In this class year, students learn to use Adobe products while developing an understanding of photography, page design, digital drawings and animation. Specifically, students will learn Adobe Illustrator for drawing logos, banners and page elements. Students will learn to use their designs on the Vinyl Cutter and Embroidery Machine to create stickers, t-shirts, posters, etc. They will learn Adobe Photoshop tips and tricks to make great photographs for their layouts. They will then use those same tools with adobe InDesign to make beautiful magazines, cookbooks and other published documents

Graphic Design and Illustration 1 Level 2
Grades: 10-12 Credits: 1

Graphic Design and Illustration 1 is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

OR

Commercial Photography 1 Level 2
Grades: 10-12 Credits: 1

In Commercial Photography 1 students apply technology applications and is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects

Graphic Design and Illustration 2/Lab Level 3
Grades: 11-12 Credits: 1-2

Graphic Design and Illustration 2 is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

OR

Commercial Photography 2/ Lab Level 3
Grades: 11-12 Credits 1-2

In Commercial Photography 2 students apply technology applications and is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects

Practicum in Graphic Design and Illustration Level 4
Practicum in Commercial Photography Level 4
Grades 12 Credits 2-3

The practicum is designed to give students supervised practical application of knowledge and skills. Experiences can occur in a variety of locations appropriate to the course work. Generally, a hands-on laboratory setting.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Graphic Design and Commercial Photography with Extended Practicum in Graphic Design and Commercial Photography

Business Management Program of Study

Business Information Management 1 (8th Grade) Level 1
Grades: 8 -12 Credits: 1

Students will learn to use the Microsoft Office Suite of programs. In this class, students will learn to format documents using Word, Excel, Powerpoint, Access, and Publisher. You will create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software. Skills learned in this class will prepare students for the workforce and postsecondary education.

Business Information Management 2 Level 2
Grades: 10- 12 Credits: 1

In Business Information Management 2 students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.

Business Management Level 3
Grades: 11-12 Credits: 1

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

Practicum in Business Management Level 4
Grades: 12 Credits: 2

Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Business with Extended Practicum in Business.

Teaching and Training Program of Study

Principles of Human Services Level 1
Grades: 9-12 Credits: 1

This course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.

Human Growth and Development Level 2
Grades 10-12 Credit: 1

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 in Education & Training Level 3
Grades 11-12 Credits: 2
Recommended Prerequisites: Principles of Human Services, Human Growth and Development
Prerequisites: Application Process

Instructional Practices in Education and Training is a field-based 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 education and exemplary educators or trainers in direct instructional roles with elementary, middle school, and high school-aged students.

Practicum in Education and Training Level 4
Grades: 12 Credits: 2 or 3
Prerequisites: Instructional Practices in Education and Training.

Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary, middle school, and high school-aged students.

OR

Project-Based Research Level 4
Grades:11-12 Credit: 1

Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Education and Training with Extended Practicum in Education and Training

Exercise Science and Wellness Program of Study

Principles of Health Science (Not in Program of Study)
Grades: 9-10 Credit: 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. 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.

Kinesiology 1 Level 2
Grades: 10-11 Credit: 1

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

Anatomy and Physiology Level 3
Grades: 11-12 Credit: 1 (This fulfills the third or fourth science requirement).
Recommended Prerequisites: 3 credits of science

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Topics will be presented through an integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems and will investigate the body's responses to forces, maintenance of homeostasis, electrical interactions, transport systems, and energy systems.
The course must include at least 40% laboratory investigation and fieldwork using appropriate scientific inquiry. This course meets the requirements for the 4th science credit.

Kinesiology 2 Level 3
Grades: 11-12 Credit: 1

Kinesiology 2 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.

Project-Based Research Level 4
Grades:11-12 Credit: 1

Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Healthcare Diagnostics and Healthcare Therapeutic Program of Study

Principles of Health Science Level 1
Grades: 9-10 Credits: 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. 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.

Health Science Theory Level 2
Grades: 10-11 Credits: 1
Recommended Prerequisites: Principles of Health Science & Biology
The Health Science course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences for continued knowledge and skill development. The course may be taught by different methodologies such as clinical rotation and career preparation learning.

Medical Terminology Level 3
Grades: 11-12 Credits: 1
Prerequisites: Health Science
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. To pursue a career in health science, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively.

Anatomy and Physiology of Human Systems Level 3
Grades: 11-12 Credits: 1 (This fulfills the third or fourth science requirement).
Recommended Prerequisites: 3 credits of science
In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Topics will be presented through an integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems and will investigate the body's responses to forces, maintenance of homeostasis, electrical interactions, transport systems, and energy systems.
The course must include at least 40% laboratory investigation and fieldwork using appropriate scientific inquiry. This course meets the requirements for the 4th science credit.

Practicum in Health Science 1 Level 3
Grades: 11 Credits: 2
Recommended Prerequisites: Principles of Health Science, Health Science and Biology
Prerequisites: Application Process
The Practicums are 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. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment.

Practicum in Health Science 2 Level 4
Grades: 12 Credits: 2
Recommended Prerequisites: Principles of Health Science, Health Science and Biology
Prerequisites: Application Process
The Practicums are 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. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment.
Students may substitute Practicum in Health Science with Extended Practicum in Health Science

Culinary Arts Program of Study

Principles of Human Services (Not in Program of Study)
Grades: 9-12 Credits: 1

This course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.

Introduction to Culinary Arts Level 1
Grades: 10-12 Credits: 1. Recommended Prerequisite: Principles of Human Services
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 Level 2
Grades: 11-12 Credits: 2
Recommended Prerequisite: Principles of Human Services and Introduction to Culinary Arts
Prerequisites: Application Process

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 will have the opportunities to pursue appropriate industry certification.

Advance Culinary Arts Level 3
Grades: 11-12 Credits: 2
Recommended Prerequisite: Culinary Arts 1

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 will have the opportunities to pursue appropriate industry certification.

Practicum in Culinary Arts Level 4
Grade: 12 Credits: 2

Practicum in Culinary Arts is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Culinary Arts with Extended Practicum in Culinary Arts

Law Enforcement Program of Study

Principles of Law, Public Safety, Corrections, & Security Level 1
Grades 9-12 Credits: 1
The course designed to introduce students will be introduced to the professions in law enforcement, security, corrections, and fire and emergency management services. The students will have the skills necessary for careers in law enforcement, fire service, security, and corrections.

Law Enforcement I Level 2
Grades: 10-12 Credits: 1
Recommended Prerequisites: Principles of Law, Public Safety, Corrections, & Security
This course is an overview of the history, organization, and functions of local, state, and federal law enforcement. The student will be introduced to the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime.

Law Enforcement II Level 3
Grades: 11-12 Credits: 1
Prerequisites: Law Enforcement I or Principles of Law, Public Safety, Corrections, & Security
Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. This course includes the ethical and legal responsibilities, operation of police and emergency telecommunication equipment, and courtroom testimony.

Forensic Science Level 4
Grade: 12 Credits: 1 (This course will fill the requirement for a third or fourth science course.)
Prerequisites: Biology, Chemistry,
Recommended Prerequisites: Principles of Law, Public Safety, Corrections, and Security, and Law Enforcement I
This is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and psychology of criminal behavior. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, and blood spatter analysis.

Practicum in Law, Public Safety, Corrections and Security Level 4
Grades: 12 Credits: 2
The Law, Public Safety, Corrections and Security Program of study focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support. This practicum course is designed to give students supervised practical applications of previously studied knowledge and skills in law, public safety, corrections and security.

Students may substitute Practicum in Law, Public Safety, Corrections and Security with Extended Practicum in Law, Public Safety, Corrections and Security

Welding Program of Study

Introduction to Welding Level 1
Grades 9-12 Credits: 1

Introduction to welding will provide an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Students will be introduced to the three basic welding processes. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. Students will develop knowledge and skills related to welding and apply them to personal career development.

Welding 1 Level 2
Grades: 10-12 Credits: 2
Recommended Prerequisite: Algebra 1 and Principles of Manufacturing

Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system in order to apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer their knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

Welding 2 Level 3
Grades: 11-12 Credits: 2
Recommended Prerequisites: Algebra 1 or Geometry and Welding1

Advanced Welding builds on knowledge and skills developed in Welding. Students will develop advanced welding concepts and skills as they relate to personal and career development. This course integrates academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Practicum in Manufacturing Level 4
Grades: 12 Credits: 2
Prerequisites: Welding 2

The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the manufacturing cluster. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Manufacturing with Extended Practicum in Manufacturing

Advance Manufacturing and Machinery Mechanic
Program of Study

Principles of Applied Engineering Level 1
Grades 9-10 Credits: 1
Recommended Prerequisites: Algebra 1

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. Learning AutoCad will be a focus of the course, along with using laser engravers and other CNC related equipment to accomplish course requirements.

Robotics 1 Level 2
Grades: 10-12 Credits: 1

In Robotics I, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.

Engineering Design & Presentation 1 Level 3
Grades: 10-12 Credits: 1
Recommended Prerequisites: Applied Engineering

Students enrolled in this course will demonstrate knowledge and skills of the process of design as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications (i.e., AutoCad and other CNC related software) to complete assignments and projects.

OR

Robotics 2 Level 3
Grades: 10-12 Credits: 1

In Robotics II, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs.

Practicum in Manufacturing Level 4
Grades: 12 Credits: 2
Prerequisites: Welding 2

The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the manufacturing cluster. The practicum is designed to give students supervised practical application of previously studied knowledge and skills.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Manufacturing with Extended Practicum in Manufacturing

Engineering Program of Study

Principles of Applied Engineering Level 1
Grades 9-10 Credits: 1
Recommended Prerequisites: Algebra 1
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. Learning AutoCad will be a focus of the course, along with using laser engravers and other CNC related equipment to accomplish course requirements.

Engineering Design & Presentation 1 Level 2
Grades: 10-12 Credits: 1
Recommended Prerequisites: Applied Engineering
Students enrolled in this course will demonstrate knowledge and skills of the process of design as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications (i.e., AutoCad and other CNC related software) to complete assignments and projects.

Engineering Design & Presentation 2 Level 3
Grades: 11-12 Credits: 2
Prerequisites: Engineering Design & Presentation 1
This course will provide students the opportunity to master computer software applications in a variety of engineering and technical fields. This course further develops the process of engineering thought and application of the design process. Students will use shop equipment and CNC machines to produce their projects.

Practicum in STEM Level 4
Grades: 12 Credits: 2
Prerequisites: Engineering Design & Presentation 1 and 2
Practicum in STEM is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

OR

Scientific Research and Design Level 4
Grades: 11-12 Credits: 1
Prerequisites: 1 Credit in STEM cluster.
Scientific Research and Design is a broad-based course that 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 may substitute Practicum in STEM with Extended Practicum in STEM

Automotive Program of Study

Automotive Basics Level 1
Grades 9-12 Credits: 1
Automotive Basics includes knowledge of Basic automotive systems and the theory and principles of the components that make up each system and how to service the systems. Includes applicable safety and environmental rules and regulations. Students will gain knowledge and skills in the repair, maintenance and servicing of vehicle systems.

Automotive Technology 1 Maintenance and Light Repair Level 2
Grades: 10-12 Credits: 2
Recommended Prerequisite: Small Engine Technology
Automotive services include knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. In Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis 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 the theory of operation of automotive vehicle systems and associated repair practices.

Automotive Technology 2 Automotive Service Level 3
Grades: 11 Credits: 2
Recommended Prerequisite: Automotive Technology 1
Automotive services include advanced knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. In Advanced Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis 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 the theory of operation of automotive vehicle systems and associated repair practice.

Practicum in Transportation Systems Level 4
Grade: 12 Credits: 2
Prerequisite: Automotive Technology 2
The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of courses in the Transportation, Distribution, and Logistics cluster. The Practicum is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience such as internships, mentorships, independent study, or laboratory.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Students may substitute Practicum in Transportation with Extended Practicum in Transportation

Cosmetology and Personal Care Program of Study

Principles of Human Services (Not in Program of Study)
Grades: 9-12 Credits: 1

This course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.

Intro to Cosmetology Level 2
Grade: 10 Credits 1
Recommended Prerequisite: Principles of Human Services
Prerequisite: Application Process

Students explore areas such as bacteriology, sterilization and sanitation, hair styling, manicuring, shampooing and the principles of hair cutting, hair styling, hair coloring, skin care, and facial makeup. The student researches careers in the personal care services industry. To prepare for success, students must have skills relative to this industry, as well as academic knowledge and skills. The course is for students who intend to complete the cosmetology program for licensure. Students will begin to earn curriculum hours toward state licensing requirements. This class will be a prerequisite for Cosmetology 1 and 2.

Cosmetology I / Lab Level 3
Grades: 11 Credits: 3
Prerequisites: Intro to Cosmetology beginning 2015-2016

This 3-period block course is a planned 1500 clock hours, two-year sequence of classroom, laboratory and internship instruction; 1000 cosmetology with 500 academic hours, which will be awarded upon passing all academic courses (English, math, science, social studies). Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair-care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.

Cosmetology II / Lab Level 4
Grades: 12 Credits: 3
Prerequisite: Cosmetology I

This 3-period block course is a planned 1500 clock hours, two-year sequence of classroom, laboratory and internship instruction; 1000 cosmetology with 500 academic hours, which will be awarded upon passing all academic courses (English, math, science, social studies). Students review academic knowledge and skills related to cosmetology. This course is designed to provide advanced training for employment in cosmetology careers. Instruction includes advanced training in sterilization and sanitation processes, hair-care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Students apply, combine, and justify knowledge and skills to a variety of settings and problems. Students must also enroll in a senior cosmetology lab.

Family and Community Services Program of Study

Principles of Human Services Level 1
Grades: 9-12 Credits: 1

This course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.

OR

Professional Communications (Speech) Level 1
Grades: 9-12 Credits: 1/2

Professional communications blends written, oral, and graphic communications in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral, and written communications. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research. The course will also 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.

Human Growth and Development Level 2
Grades 10-12 Credit: 1

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.

Counseling and Mental Health Level 3
Grades 11-12 Credit: 1

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

Project-Based Research Level 4
Grades:11-12 Credit: 1

Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

OR

Career Preparation 1 Level 4
Grades: 12 Credits: 2

Career Preparation 1 provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Other CTE Courses offered

Career Preparation 1 and Career Preparation 2
Grades: 11-12 Credits: 2-3

Career Preparation 1 and 2 provide opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences paid or unpaid. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Principles of Technology
Grades: 11-12 Credits: 1
Prerequisites:1 science credit and Algebra I. (Will fulfill the requirement for a third or fourth science.)

In Principles of Technology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Various systems will be described in terms of space, time, energy, and matter. Students will study a variety of topics that include laws of motion, conservation of energy, momentum, electricity, magnetism, thermodynamics, and characteristics and behavior of waves. Students will apply physics concepts and perform laboratory experimentations for at least 40% of instructional time using safe practices.

Fundamentals of Computer Science

Grades: 9-12 Credits: 1

Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems.