2024-25 HIGH SCHOOL

COURSE DESCRIPTION GUIDE

CISD

IN ITS EFFORTS TO PROMOTE NON-DISCRIMINATION, CROWLEY ISD DOES NOT DISCRIMINATE ON THE BASIS OF RACE, RELIGION, COLOR, NATIONAL ORIGIN, GENDER, 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.

#CROWLEYPRIDEUNIFIED

Table of Contents

Click any item in the table contents to navigate to that section.

Scheduling and Course Selection

Course selection will take place late in the fall or early in the spring semester of each school year. Although students will receive specific instructions during that time from middle/high school personnel, the responsibility for appropriate graduation and career choices rests with the student and parents. The counseling staff is available to assist in making decisions related to course selections.

One of the most critical functions performed by a school is obtaining the course selection of students. Based upon the course selection information, courses are scheduled and teachers are employed for the next year; therefore, it is important that course selections be given serious consideration. After school begins, changes will only be made to correct scheduling errors or to equalize class enrollments.

The purpose of the Course Description Guide is to provide information regarding graduation plans and courses offered to fulfill those plans, and it will be useful to those who read thoroughly and follow up with any questions. Students should take the time to read the course descriptions carefully, noting the recommended grade levels and any prerequisite course. Courses selected by students each year should follow a plan for graduation and future career goals and be based on interest and ability. The professional staff of the campus are an important support to provide guidance, information, and resources.

We realize course registration may bring about many questions. Please feel free to call the counseling center at your middle/high school. The counselors will be glad to answer your questions.

Crowley High School
817-297-5810

North Crowley High School
817-263-1250

Crowley Middle School
817-370-5650

Richard Allie Middle School
817-297-5394

Crowley Ninth Grade
817-297-5845

North Crowley Ninth Grade
817-297-5896

H.F. Stevens Middle School
817-297-5840

Summer Creek Middle School
817-297-5090

High School Graduation Plans

Distinguished Level of Achievement *Crowley ISD Graduation Standard*	Foundation + Endorsements	Foundation Only
26 Credits	***26 Credits***	***22 Credits***
4 credits English ELA I, II, III, plus one credit in any authorized advanced English course	**4 credits English** ELA I, II, III, plus one credit in any authorized advanced English course	**4 credits English** ELA I, II, III, plus one credit in any authorized advanced English course
4 credits Mathematics Algebra I, II, Geometry, plus one credit in any authorized advanced math course	**4 credits Mathematics** Algebra I, Geometry, plus two credits in any authorized advanced math courses	**3 credits Mathematics** Algebra I, Geometry, plus one credit in any authorized advanced math course
4 credits Science Biology, Chemistry, Physics plus one credit in additional advanced courses	**4 credits Science** Biology, Chemistry, Physics plus one credit in additional advanced courses	**3 credits Science** Biology, IPC or advanced science course plus two additional advanced courses
3 credits Social Studies World Geography *or* World History, U.S. History, U.S. Government (.5 credit), Economics (.5 credit)	**3 credits Social Studies** World Geography *or* World History, U.S. History, U.S. Government (.5 credit), Economics (.5 credit)	**3 credits Social Studies** World Geography *or* World History, U.S. History, U.S. Government (.5 credit), Economics (.5 credit)
2 credits World Language or Computer Programming Language (Computer Science)	**2 credits** World Language or Computer Programming Language (Computer Science)	**2 credits** World Language or Computer Programming Language (Computer Science)
1 credit Physical Education	**1 credit** Physical Education	**1 credit** Physical Education
1 credit Fine Arts	**1 credit** Fine Arts	**1 credit** Fine Arts
.5 credits Professional Communication (optional, but may be required by the College/University of your choice)	**.5 credits Professional Communication** (optional, but may be required by the College/University of your choice)	**.5 credits Professional Communication** (optional, but may be required by the College/University of your choice)
7 credits in electives (may include CTE or certification courses)	**7 credits in electives** (may include CTE or certification courses)	**5 credits in electives** (may include CTE or certification courses)
Credit requirements specific to at least one endorsement	*Credit requirements specific to at least one endorsement*	

Performance Acknowledgements & Endorsements

All high school students graduate under the Foundation High School Program (FHSP) graduation plan. Students will also have the opportunity to enhance their graduation plan by earning Performance Acknowledgements, Distinguished Level of Achievement, and Endorsements. Students declare their preferred endorsement area, in writing, by the beginning of their ninth grade year. All middle school students receive advisement on endorsements and each student is encouraged to work with their assigned campus counselor for individual guidance.

Performance Acknowledgements

Students can earn performance acknowledgements for dual credit, bilingualism and biliteracy, AP or IB exams, PSAT, SAT or ACT testing, or certifications and licensures. For detailed information, please visit the Counseling Services website at www.crowleyisdtx.org/Page/2134.

Distinguished Level of Achievement

The Distinguished Level of Achievement (DLA) is the highest graduation program in the state of Texas. A student may earn a Distinguished Level of Achievement by successfully completing the curriculum required for the Foundation Graduation Plan with the addition of the following criteria:

- Completion of a coherent sequence of courses in one or more Endorsement(s)
- Four credits in mathematics, including Algebra II
- Four credits in science

Endorsements

Endorsements are made up of four courses or four or more credits taken in a coherent sequence that provide advanced or more in-depth knowledge and skills in a curriculum area. Middle school students should explore career information related to the endorsement areas listed below so they may begin to think about what areas they will want to take more in-depth coursework during their educational career in high school. Students select their endorsement(s) during their 8th grade year and revisit their choices annually under the guidance of a counselor. The endorsement area serves as an entry into a career field, either directly upon high school graduation or a continuance of courses in college enrollment.

A list of endorsements and related disciplines/careers can be found on the following page.

Endorsements
Arts and Humanities - For students interested in careers that require coursework in the following disciplines: Languages other than English (LOTE); Fine Arts; Social Studies; and English
Business and Industry - For students who are interested in careers in the following fields: Animal Science, Applied Agricultural Engineering, Plant Science, Architectural Design, Construction Technology (Carpentry), Design and Multimedia Arts, Digital Communications in Audio or Video, Accounting and Financial Services, Business Management, Entrepreneurship, Culinary Arts, Information Technology Support and Services, Networking Systems, Automotive Technology, Distribution and Logistics, Aviation Flight, Aviation Maintenance, Public Speaking, Debate, or Journalism
Multidisciplinary Studies - For students who are interested in taking advanced coursework (including Advanced Placement, Dual Credit, and UT OnRamps) in various disciplines. This endorsement may be combined with other endorsements.
Public Services - For students who are interested in careers in the following fields: Early Learning, Teaching and Training, Healthcare Therapeutics, Cosmetology, Family and Community Services, Emergency Services, Law Enforcement, and Legal Studies.
STEM - For students who are interested in careers in the following fields: Unmanned Autonomous Vehicles and Systems (UAV/UAS), Biomedical Science, Cybersecurity, Engineering, Mathematics, Science, and Programming and Software Development. *Note: This endorsement requires completion of Algebra II, Chemistry and Physics.*

Note: For the Business & Industry, Public Services, and STEM Endorsements, detailed course information is provided in the CTE section of the High School course guide.

State Assessments required for graduation: English I, English II; Algebra I; Biology, US History

Texas College, Career and Military Readiness (CCMR) Requirements

To ensure all students are post-secondary ready for life after high school graduation, Crowley ISD follows the College, Career, Military Readiness standards set by the Texas Education Agency. Every graduate from the district is highly encouraged to meet at least one of the following standards while enrolled in grades 9-12:

- Meet criteria of 3 on AP or 4 on IB examination
- Meet TSI criteria via SAT, ACT, TSI-A, or College Prep Course in English and math
- Complete a dual credit course (9 hours in any subject or 3 hours English/mathematics)
- Earn an associate's degree
- Complete an OnRamps course
- Earn an IBC within an aligned Program of Study
- Earn a Level I or Level II certificate
- Graduate with completed IEP and workforce readiness
- Be admitted to postsecondary industry certification program
- Enlist in the US Armed Forces

Academic and General Information

CISD Grading System for Grades 9-12

Campuses use a weighted numerical grading system to calculate semester grades. In calculating GPA, additional weight is given to courses designated as Advanced Academic courses. Please see the Crowley ISD Guidance and Counseling web page for information on how to calculate GPA. The following chart reflects the CISD grading system for grades 9-12.

A	**90-100**
B	**80-89**
C	**70-79**
F	**69 and below**

Enrollment

A student enrolling in the district for the first time must be accompanied by his/her parent(s) or legal guardian and must provide satisfactory evidence of required immunization, proof of residency (acceptable: utility bill or lease agreement), copy of birth certificate and social security card, and a withdrawal form from the previous school. Guardians must also complete the Skyward application for enrollment through the New Student Online Enrollment portal.

Schedule Changes

All schedule changes requested by the student must be initiated on the campus schedule change form and initiated by the required deadlines.

Requested Schedule Change		
Course Length	**1st Semester**	**2nd Semester**
Year-Long Course	First five instructional days	Last two weeks of first semester until first two instructional days
Semester Course	First five instructional days	First five instructional days of second semester

Schedule changes after the schedule change deadline could result in a loss of credit and the possibility of a delay in graduation. If a concern about improper academic placement occurs after the schedule change deadline, a parent-teacher conference must be held. If parent, teacher, counselor and/or administrator agree that an improper academic placement has been made, after academic interventions have occurred, a schedule change may be requested and possibly granted by campus administrative approval. Any questions about schedules should be referred to the counseling office.

Schedule changes are normally made only under the conditions listed below:

- A student fails a course.
- A change is needed as a result of a credit earned in summer school.
- A change is needed to balance classes during the semester.
- A student has a schedule which is not educationally appropriate.
- A change is needed as a result of a student being elected to or administratively assigned to an activity within the school.
- A change will enable a senior to graduate in the senior year.
- A change that, in the judgment of the principal, is in the best interest of the student and/or the teacher.

Students must request schedule changes within the time frame established by CISD.

For Students Entering CISD for the First Time in Grades 9-12

The following conversion chart shall be used to enter transfer grades if the previous school does not have a conversion chart. CISD will use the conversion chart of the student's previous school if one is provided.

A+	A	A-	B+	B	B-	C+	C	C-	D	F
98	95	92	88	85	82	78	75	72	70	60

Students transferring from unaccredited schools or homeschooling shall be individually assessed. Please see the campus counselor for additional information.

Required Courses

These courses are required to fulfill state educational guidelines. See the graduation plan for required courses. A course may or may not have a prerequisite – a course that must be taken prior to the course under consideration.

Elective and Endorsement Courses

In addition to required state courses, students must choose other courses to complete their schedules and their graduation plan. Endorsement courses or elective credits should be chosen according to the students Personal Graduation Plan (PGP).

Gifted and Talented Program

The Gifted and Talented (GATE) Program within the Crowley Independent School District is an integral part of the district's fundamental commitment to meet the individual needs of all students. The school district is dedicated to the development of each student's talents and abilities. In the ninth through twelfth grade, gifted students are served through advanced courses.

Special Education Program

Special Education courses are offered to assist eligible students in both academic and nonacademic areas. Graduation may be the successful completion of all curriculum requirements and satisfactory performance on the secondary exit-level assessment instrument, or it may be the successful completion of an individualized education program (IEP) and the criteria for graduating pursuant to an IEP. A student with disabilities may graduate by completing the same program required of non-disabled students or by completing the requirements of his/her IEP and meeting the criteria set forth by the commissioner in 19 TAC 89.1070. A sample four-year alternate graduation plan can be viewed here.

English for Speakers of Other Languages (ESOL)

All students who enroll in Crowley ISD will complete a home language survey. If this survey indicates that a language other than English is used in the child's home most of the time or used by the child most of the time, a language proficiency assessment will be administered. Students who are found to be limited English Proficient (LEP) and are immigrants with three years or less in the United States, may be enrolled in the ESOL classes as determined by the LPAC (Language Proficiency Committee). The English For Speakers of Other Languages program at the middle school level enrolls English language learners who require English language development instruction and orientation to a new cultural and academic environment. ESOL students receive daily English language development instruction from an ESOL teacher.

Career and Technical Education

The Career and Technical Education (CTE) Program in CISD is dedicated to preparing young people for careers and college. CTE Programs of Study identify endorsements from secondary school to two- and four-year colleges, graduate school, the workplace, and industry certification so students can prepare for beyond high school. This program enables students to gain entry-level employment in a high-skill, high-wage job and/or to continue their education. Many of the CTE courses and endorsement courses are offered at the Bill R. Johnson CTE Center (BRJ CTEC). Students can attend their home campus and be transported to BRJ CTEC during the school day.

High School PE and Substitutions

According to TEA, students must earn one credit of physical education (PE) and may earn no more than four credits to satisfy state graduation requirements. Certain activities may be substituted for a PE course. Students participating in approved substitution activities for PE credit are required to participate in at least 100 minutes per five-day school week at a moderate or vigorous level.

Activities allowed as PE substitutions include JROTC, athletics, marching band, cheerleading 1st semester for the first two years, drill team 1st semester for the first two years, approved appropriate private or commercially- sponsored programs and Olympic-level participation and/or competition includes a minimum of 15 hours per week of highly intensive, professional, supervised training.

Local Credit Courses

Local credits are awarded for locally developed courses that are approved for CISD credit only and are not counted toward required state graduation credits.

NCAA (National Collegiate Athletic Association) Eligibility Requirements

To be eligible for Athletic scholarships at any NCAA Division I and II campuses during the freshman year of college, students must gain certification from the NCAA Eligibility Center showing that they meet NCAA requirements. More information can be obtained from the Counseling Office and the following website – www.eligibilitycenter.org

Additional Ways to Earn Credit

The State Board of Education has proposed different methods by which a student may earn credit. For more information, please contact your high school's counseling center.

- ❏ **Credit by Examination (CBE) for Credit Recovery (With Prior Instruction)**
  Credit by Exam is designed as an option to earn credit for those students who have attended a class, at least 55 hours (11 weeks) and received a semester average no lower than a 60. The decision to allow a student to earn Credit by Exam must be made by the attendance committee when failure of the course resulted from excessive absences. Students have the opportunity to take an exam through Texas Tech or UT Austin Correspondence School. Applications may be obtained online and approved in the high school counseling center. A score of 70 or better is required for credit. If credit is awarded, grades will be recorded on the student's transcript, computed in the credits toward graduation, and calculated in the student's overall grade average and rank in class. Fees are established by the universities. Student/Parent is responsible for fees charged by Texas Tech or UT Austin.

- ❏ **Credit by Examination (CBE) For Acceleration (Without Prior Instruction)**
  Students who provide evidence of proficiency in a subject area may take a CBE for acceleration. A score of 80% is required for credit per Senate Bill 1. Contact your counselor for more information. If credit is awarded, grades will be recorded on the student's transcript, computed in the credits toward graduation, and calculated in the student's overall grade average and rank in class. Testing dates and registration dates for 2016-2017 are available in each campus counseling office.

- ❏ **Correspondence/Virtual Courses**
  Students in grades 9-12 are eligible to earn credits toward graduation through correspondence/virtual courses. Grades earned in correspondence/virtual courses will be recorded on the student's transcript, computed in the credits toward graduation, and calculated in the student's overall grade average and rank in class. Students may apply for these course options through their high school counseling center. Self- discipline to complete the lessons and taking the final exams within a specific time frame are important factors when considering correspondence/virtual courses.

State approved correspondence courses are offered by Texas Tech and UT Austin. Students are responsible for all course fees and textbook(s). Crowley ISD also offers courses through Connections Academy for enrichment for additional courses not offered on a Crowley ISD campus such as additional foreign languages or Advanced Placement courses. See your high school counseling center for more information.

Crowley ISD also has a full-time virtual academy, Global Prep Academy. For more information, see your high school counseling center.

Grade Level Advancement and Classification

Grade-level classification for students in grades 9-12 shall be determined by course credits earned.

Classification of Students	
Freshman	0 - 5.5 state graduation credits
Sophomore	6 - 11.5 state graduation credits
Junior	12 - 18.5 state graduation credits
Senior	19 or more state graduation credits

Transcripts

Students can make transcript requests electronically using Xello. Below is a link to directions on how to submit a transcript request using the Xello system. If there are further questions about this process, please contact the student's respective counseling office or campus registrar. Students may also make requests through the registrar's office. A transcript is a working document and not complete until graduation.

Xello: How Students Request Transcripts

Attendance for Credit

To receive credit in a class, a student must attend at least 90 percent of the days the class is offered. A student who attends fewer than 90 percent of the days the class is offered may be referred to the attendance review committee to determine whether there are extenuating circumstances for the absences and how the student can regain credit.

High School Opportunities for Repeating a Failed Course

A student may repeat any course provided the student's grade earned in an earlier semester/year is below 70. (or is a senior who is currently enrolled in a course will not be able to mathematically make a 70 for graduation credit). In the event that a student earns a grade below 70 in a course required for graduation, he or she must repeat the course until a grade of 70 is earned in order to receive graduation credit. All grades and all credits attempted/earned are used to calculate the student's grade point averages, unweighted and weighted/calibrated. The highest grade that can be earned for a credit retrieval course is a 70. Credit retrieval in CISD may occur through the following methods:

1. Credit by Exam with prior instruction (board policy EHDB)
2. Correspondence Course
3. Summer School – based on availability of courses and Credit Retrieval Fee Schedule (see Counselor)
4. Repeating the course in the following school year
5. Online Credit retrieval courses offered at the high school based upon available courses during the instructional day or before and after school.

Advanced Courses & College Credit During High School

Crowley ISD offers many opportunities for students to gain college credit while enrolled in high school. These are offered through several higher education partners. Students can begin to take college credit courses as early as ninth grade if the qualifications for the course are met. If the course is through a college, students must also enroll in that college. For more information, visit the College, Career, and Military Readiness web page at crowleyisdtx.org/Domain/659 or contact a counselor or Advanced Academic Coordinator at each high school campus.

Students may gain college credit by taking an advanced academic course, being accepted into Crowley Collegiate Academy, C-ATL, the P-TECH academy, or taking a Career and Technical Education dual credit course or program of study.

Courses for college credit, as well as advanced courses qualifying for weighted GPA consideration, are listed in this section.

Dual Credit (in partnership with Tarrant County College and Lamar State College-Port Arthur)

Our Dual Credit program is a way for students to earn college credit while attending high school. Students take college-level courses taught by TCC/LSCPA faculty, or in some cases, Crowley ISD teachers who are credentialed by these colleges. These courses satisfy high school graduation requirements and provide college credit at the same time.

Dual Credit in Crowley ISD is free to all students, and dual credit courses are offered for both academic core classes and several CTE programs of study.

Students desiring to take courses directly with TCC or through other institutions will need to pay both tuition and books. Only courses listed below under “Dual Credit Basics/Core Curriculum” will be eligible to earn dual credit if taken outside of the CISD program.

Students who wish to take these courses outside of the CISD Dual Credit program must first gain permission from their counselor to ensure that the credit will be accepted prior to taking the class. Students must then bring their transcript to their counselor after taking the class in order to receive high school credit.

Per Crowley ISD board policy EIC(LOCAL), all dual credit courses are categorized and weighted according to the 5.0 GPA scale.

Students may take dual credit if they meet TCC or LSCPA/CISD guidelines, which includes passing the TSI and registering as a student at TCC South Campus or Lamar State College-Port Arthur. Alternative classes may be offered when the colleges change their numbering, are unable to provide a suitable instructor, or the program design changes as approved by district administration.

Dual Credit Course Offerings

Dual Credit Basics / Core Curriculum

** indicates course with TSI requirement*

ARTS 1301	Art Appreciation
DRAM 1310	Introduction to Theater
ECON 2301	Principles of Macroeconomics
ECON 2302	Principles of Microeconomics
*ENGL 1301	Composition 1
*ENGL 1302	Composition 2
*ENGL 2323	British Literature 2
*ENGL 2328	American Literature 2
*GOVT 2305	Federal Government
*GOVT 2306	Texas Government
*HIST 1301	United States History 1
*HIST 1302	United States History 2
*MATH 1314	College Algebra
*MATH 1342	Elementary Statistical Methods
MUSIC 1306	Music Appreciation
PSYC 2301	General Psychology
SOCI 1301	Introduction to Sociology
SPAN 2311	Intermediate Spanish 1
SPAN 2312	Intermediate Spanish 2
SPCH 1311	Introduction to Speech Communication
SPCH 1321	Business and Professional Communication

Crowley Collegiate Academy (CCA)

ACCT 2301	Principles of Financial Accounting
ACCT 2302	Principles of Managerial Accounting
BIOL 1406	Biology for Science Majors 1 + Lab
BIOL 1407	Biology for Science Majors 2 + Lab
BIOL 1408	Biology for Non-Science Majors 1 + Lab
BIOL 1409	Biology for Non-Science Majors 2 + Lab
BCIS 1305	Business Computer Applications
BUSI 1301	Business Principles
BUSI 2305	Business Statistics
MUSI 1306	Music Appreciation
ECON 2301	Principles of Macroeconomics
ECON 2302	Principles of Microeconomics
ENGL 1301	Composition 1
ENGL 1302	Composition 2
ENGL 2323	British Literature 2
GOVT 2305	Federal Government
GOVT 2306	Texas Government
HIST 1301	United States History 1
HIST 1302	United States History 2
KINE 1164	Introduction to Physical Fitness & Wellness
MATH 1324	Mathematics for Business & Social Sciences I
SPCH 1321	Business and Professional Communication

CTE Automobile Technician Program

AUMT 1405	Introduction to Automotive Technology
AUMT 1407	Automotive Electrical Systems
AUMT 2317	Automotive Engine Performance Analysis I
AUMT 2334	Automotive Engine Performance Analysis II
AUMT 2321	Automotive Electrical Diagnosis and Repair
AUMT 2388	Internship - Automotive Mechanics Technology

Students completing AUMT 1305, 1407, 2317 earn an Occupational Skills award. Students who complete all 5 courses receive a Level 1 Engine Analysis Technician Certificate.

Aviation Maintenance Technology

AERM 1101	Introduction to Aviation
AERM 1205	Weight and Balance
AERM 1314	Basic Electricity
AERM 1315	Aviation Science
AERM 1351	Aircraft Turbine Engine Theory
AERM 1208	Federal Aviation Regulations
AERM 1310	Basic Electricity
AERM 1303	Shop Practices
AERM 1344	Reciprocating Engines
AERM 1456	Powerplant Electricity
AERM 2351	Aircraft Turbine Engine Overhaul
AERM 1357	Fuel Metering and Induction Systems
AERM 1340	Aircraft Propellers
AERM 2547	Aircraft Reciprocating Engine Overhaul
AERM 2252	Aircraft Powerplant Inspection

Criminal Justice Program

CJSA 1347	Police Organization and Administration
CJSA 1348	Ethics in Criminal Justice
CJSA 2334	Contemporary Issues in Criminal Justice
CJSA 2388	Internship in Criminal Justice and Safety Studies
CRIJ 1301	Introduction to Criminal Justice
CRIJ 1306	Court Systems and Practices
CRIJ 1307	Crime in America
CRIJ 1310	Fundamentals of Criminal Law
CRIJ 1313	Juvenile Justice System
CRIJ 2313	Correctional Systems and Practices
CRIJ 2314	Criminal Investigation
CRIJ 2323	Legal Aspects of Law Enforcement
CRIJ 2328	Police Systems and Practices

To earn the 60 hour Associate's degree, students will need to complete the courses listed above as well as: ENGL 1301 & 1302, GOVT 2305 & 2306, MATH 1314, SOCI 1301, SPCH 1311.

Business Certification, Level One

ACCT 2301	Principles of Financial Accounting
ACCT 2302	Principles of Managerial Accounting
BUSI 1301	Business Principles
BUSI 2301	Business Law
ECON 2301	Principles of Macroeconomics
ECON 2302	Principles of Microeconomics
MRKG 1311	Principles of Marketing
BMGT 1305	Communications in Management

Students completing all 8 courses will receive a Level 1 Business 1 Certificate.

Logistics and Supply Chain Management

Associate Degree* | *Level 1 Certification

LGMT 1319	Intro to Business Logistics
IBUS 1301	Exports
LGMT 1325	Warehouse and Distribution Management
IBUS 1302	Principles of Imports
BCIS 1305	Business Computer Applications
SPCH 1321	Intro to Speech Comm.
LMGT 1323	Domestic and International Travel
LMGT 2334	Principles of Traffic Mgmt
LMGT 2371	Supervision
BUSI 2301	Business Law
MUSI 1306	Music Theory
MRKG 1311	Principles of Marketing 12th
BMGT 1313	Principles of Purchasing
BMGT 2331	Principles of Quality Mgmt
BMGT 1331	Prod Op Mgmt
LGMT 2388	Internship

Students completing 15 hours will receive a Level 1 certification.

To earn the 60 hour Associate's degree, students will need to complete the courses listed above as well as: ENGL 1301, MATH 1314, ACCT 2301, ECON 2301, SPCH 1321, & MUSI 1306

Unmanned Autonomous Vehicles/Systems

	Robotics I ***(HS Course)***
	Intro to UAV ***(HS Course)***
GISC 1402	Understanding GIS
GISC 2401	Data Acquisition and Analysis in GIS
GISC 2402	GIS with Raster Systems
GISC 2404	GIS with Vector Systems
GISC 2420	Intermediate GIS

Pharmacy Technician

PHRA 1301	Introduction to Pharmacy
PHRA 1305	Drug Classification
PHRA 1349	Institutional Pharmacy Practice
PHRA 1313	Community Pharmacy Practice
PHRA 1345	Compounding Sterile Preparations
PHRA 1202	Pharmacy Law
PHRA 1209	Pharmaceutical Math I

Culinary Arts Program

CHEF 1301	Basic Food Pre
CHEF 1305	Sanitation and Safety
HAMG 1321	Introduction to Hospitality Industry
RSTO 1313	Hospitality Supervision
PSTR 1301	Fundamentals of Baking
CHEF 1310	Garde Manager
CHEF 2331	Advanced Food Preparation

PHRA 1243	Pharmacy Technician Certification Review	CHEF 1264	Practicum
PHRA 1247	Pharmaceutical Math II		
PHRA 1260	Clinical Pharmacy Technician/Assistant		
Computer Programming *Associate Degree* / Level I Certification / Level II Certification		**Emergency Medical Technician** Level I Certification	
BCIS 1305	Business Computer Applications	ENGL 1301	Composition I
MUSI 1306	Music Appreciation	GOVT 2305	Federal Government
ITNW 1309	Fund of Cloud Computing		OR
COSC 1436	Prog Fundamentals I	GOVT 2306	Texas Government
ITSE 1479	Intro to Scripting Languages	COSC 1301	Introduction to Computing
COSC 1437	Prog Fundamentals II		Creative Arts/Language, Philosophy and Culture
ITSE 2417	Java Programming		Semester Hours: 3*
CPMT 1403	Intro to Computer Tech	EMSP 1501	Emergency Medical Technician
ITSY 1300	Fund of Info Security	EMSP 1160	Clinical - Emergency Medical Technology
COSC 2436	Prog Fundamentals III		
ITNW 1425	Fund Networking Technologies		
1TSE 2409	Database Programming		
ITSE 1450	System Analysis & Design		

Crowley Collegiate Academy (CCA)

Crowley Collegiate Academy (CCA) is an early college education program that provides high school age students a seamless pathway from high school to college. All of the scholar's classes are taken at CCA or TCC. This requires dual enrollment in high school and Tarrant County College, with each scholar demonstrating mastery of the knowledge and skills necessary for success (TSI-A and other requisite tests). The strengths of this school include: its size, the collegiate environment, collaboration between faculty, development of career-focused and personalized educational plans for students, and access to the resources of one of Texas' premier community colleges.

Scholars who graduate from CCA have the opportunity to earn their high school diploma, accumulate up to 63 college credits and earn an Associates Degree, transferable to a senior college/university or leading to employment. CCA provides strong support to scholars and their families to obtain entrance to, and success in, college or the workplace. Our mission is to develop life-long learners. CCA scholars and staff commit to build relationships through mutual respect and promote a growth mindset, which includes a learning style of grit and integrity.

For more information about CCA, please visit the CCA website at https://www.crowleyisdtx.org/cca or email us at CCA.Information@crowley.k12.tx.us.

Crowley Academy of Aviation, Transportation and Logistics (C-ATL)

C-ATL is housed at Bill R. Johnson CTE Center and is an integration of academic and CTE courses. Students who are enrolled in C-ATL are able to concentrate on careers in Aerospace and Aviation. Opportunities are provided in the following career pathways--Aviation Maintenance, Aviation Flight, Supply Chain Management, Computer Programming, and Unmanned Autonomous Systems and Vehicles (UAV/UAS).

Advanced Placement (AP)

Advanced Placement (AP) courses follow a curriculum which is outlined by the College Board and reflects the appropriate college-level material required for success on the College Board AP exams given each spring. Each

exam may have a corresponding fee and it is the responsibility of the student to inquire if their college of choice accepts AP exam credit and to request that credit is given upon enrollment. ***Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit. AP exam registration begins in the first week of school and payment will be due by the end of October. This is done in accordance with College Board deadlines.***

Dual Enrollment (UT OnRamps)

UT OnRamps is a dual enrollment program for high school students to engage in authentic college experiences that offer both high school graduation requirements and college credit. Courses are taught by CISD teachers who are credentialed by the University of Texas at Austin. UT OnRamps courses are open enrollment and with free tuition. More information can be found at onramps.utexas.edu.

Courses for Weighted Credit

In addition to the dual credit courses listed above (all of which are weighted according to the 5.0 GPA scale), the advanced courses listed below receive a weight of either 4.5 or 5.0 when calculating a student's GPA and class rank per board policy EIC(LOCAL).

Advanced Courses Weighted on a 4.5 Scale	
Content	**Course Name**
English Language Arts	Pre-AP English I & II
Science	Honors Biology | Honors Chemistry
Mathematics	Honors Algebra I Honors Geometry | Algebra II
Advanced Languages	Pre-AP French II & III Pre-AP German II & III Pre-AP Spanish II & III

Advanced Courses Weighted on a 5.0 Scale	
Content	**Course Name**
English Language Arts	AP English III - Language and Composition AP English IV - Literature and Composition OnRamps English III/IV Creative Writing Literary Genres - Multicultural Literature Humanities Humanities II (Independent Study in English - Analysis of Visual Media) Debate III
Science	AP Biology | Honors Chemistry | AP Environmental Science | OnRamps Chemistry | OnRamps Physics | OnRamps Biology |

Mathematics	AP Pre-Calculus | AP Calculus AB | AP Calculus BC | AP Statistics Independent Study in Mathematics - Calculus OnRamps Pre-Calculus | OnRamps College Algebra (Algebra II)
Social Studies/History	AP Macroeconomics | AP US Government and Politics AP Comparative Government | AP US History | AP European History AP Psychology | AP Human Geography | AP World History AP African-American Studies | OnRamps US History
Advanced Languages	AP French IV (Language) | AP German IV (Language) AP Spanish IV (Language) | AP Spanish V (Literature)
Computer Science	Computer Science I, II & III AP Computer Science A AP Computer Science Principles
Fine Arts	AP Music Theory | AP Art/Drawing | Art IV Drawing Dance IV | Music IV Band | Jazz Studies IV | Color Guard IV Music IV Choir | Vocal Ensemble IV | Theatre IV Theatre Production IV
Project Lead the Way	Introduction to Engineering (IED) | Principles of Engineering (POE) Digital Electronics (DE) | Aerospace Engineering (AE) Engineering Design & Development (EDD) Biomedical Science | Human Body Systems | Medical Interventions Practicum of STEM
Dual Credit	All dual credit courses receive weighted credit (5.0 scale)

High School Assessments

STAAR - End Of Course Assessment Program

Starting with the 9th grade class of 2011-2012, students are required to take the STAAR EOC (State of Texas Assessments of Academic Readiness End-of-Course) exams. Students must successfully demonstrate mastery at the end of Algebra I, United States History, English I, English II, and Biology.

PSAT/NMSQT

This test is designed to test the verbal, mathematical, and written skills of students. This test is taken in preparation for the SAT during the junior year. National Merit Scholarships are available if the student's junior level scores qualify him/her to be a Finalist. **ALL ninth and tenth graders** take the PSAT as practice for the junior year where the scores count for scholarship consideration. This test is given once per year in mid-October. Tests are offered during the school day.

PSAT 8/9

This test measures skills students need to be on track for success in college and careers. The PSAT 8/9 is given during middle school and the PSAT 8/9 is given during the ninth-grade year. Tests are offered during the school day.

SAT/ACT

Most colleges and universities require one of two major entrance exams: The American College Testing Program (ACT) and/or the Scholastic Aptitude Test (SAT). Students usually take these at the end of the junior year or at the beginning of the senior year. Tests are offered once a calendar year during the school day. A schedule of additional testing dates is available on the College Board website. Websites are www.actstudent.org and www.collegeboard.com.

SAT Subject Area Tests

Some colleges require students to take the SAT subject area tests. These are subject tests given on specific SAT dates. Check with the college you plan to attend to verify whether these tests are needed for admission.

TSI

The TSI Assessment is designed to help colleges determine if you are ready for college-level course work in the general areas of reading, writing and mathematics. In CISD, it is given several times at NCHS and CHS. This will occur both during the school day and on Saturdays. Additionally, it is given to 9th graders at CH9 and NC9 in the Spring semester. Please see your campus testing coordinator or counselor for more information.

English / Language Arts

English I Course #: 01090100
Recommended Grade Placement: 9 1 Credit

Students in this course focus on vocabulary, close reading, critical thinking, and analysis in diverse, multi-genre, thematic units from American and world literature sources. Students engage in the embedded research process and use the writing process to compose multiple texts employing appropriate revising and editing conventions.

English I Pre-AP Course #: 01090175
Recommended Grade Placement: 9 1 Credit

English I Pre-AP follows the College Board requirements and framework and utilizes the vertically aligned SpringBoard units of study. Students develop close reading, analytical and evidence-based writing, and language practices essential for immediate relevance and future AP and college coursework. Students apply vocabulary, critical thinking, and analysis within and across increasingly complex texts. Students engage in the investigative research process and use the writing process to compose multiple texts employing appropriate revising and editing conventions. This course meets the requirements for the College Board Pre-AP designation. *Pre-AP courses receive weighted GPA credit.*

English for Speakers of Other Languages I (ESOL I) Course #: 01220100
Recommended Grade Placement: 9 1 Credit
Prerequisite: Qualify through testing and immigrant status, LPAC placement

This course provides listening, speaking, reading, and writing activities from simple to complex in order to increase the students' comprehension and ability to express themselves. The focus will be on grammar and literature for the grade level. *This course is designed for students who are speakers of other languages who have limited English skills, have immigrant status, and have been in the United States three years or less.*

English II Course #: 01100200
Recommended Grade Placement: 10 1 Credit
Prerequisite: English I

Students in this course focus on vocabulary, close reading, critical thinking, and analysis in diverse, multi-genre, thematic units from American and world literature sources. Students engage in the embedded research process and use the writing process to compose texts employing appropriate revising and editing conventions.

English II Pre-AP Course #: 01100250
Recommended Grade Placement: 10 1 Credit
Prerequisite: English I

English II Pre-AP follows the College Board requirements and framework and utilizes the vertically aligned SpringBoard units of study. Students develop close reading, analytical and evidence-based writing, and language practices essential for immediate relevance and future AP and college coursework. This course meets the requirements for the College Board Pre-AP designation. *Pre-AP courses receive weighted GPA credit.*

English For Speakers Of Other Languages (ESOL) II Course #: 01220200
Recommended Grade Placement: 10 1 Credit
Prerequisite: Qualify through testing and immigrant status, LPAC placement

This course provides listening, speaking, reading, and writing activities from simple to complex in order to increase the students' comprehension and ability to express themselves. Each course focuses on grammar and literature for the grade level. *This course is for students who are speakers of other languages who have limited English skills, have immigrant status, and have been in the United States three years or less.*

English III Course #: 01110300
Recommended Grade Placement: 11 1 Credit
Prerequisite: English II

Students in this course focus on vocabulary, close reading, critical thinking, and analysis in diverse, multi-genre, thematic units from American literature sources. Students engage in the embedded research process and use the writing process to compose multiple texts employing appropriate revising and editing conventions.

English Language & Composition – Advanced Placement Course #: 01110350
Recommended Grade Placement: 11 1 Credit
Prerequisite: English II (Pre-AP English II highly recommended)

English Language and Composition Advanced Placement aligns to an introductory college-level rhetoric and writing course which is designed to prepare the motivated student to achieve success on the AP English Language and Composition Exam. Students focus on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Students also read and analyze rhetorical elements and their effects in nonfiction texts-including images as forms of text-from a range of disciplines and historical periods. Students enrolled in Advanced Placement courses are required to take the Advanced Placement exam for each course in order to receive credit. *AP courses receive weighted GPA credit.*

English IV Course #: 01120400
Recommended Grade Placement: 12 1 Credit
Prerequisite: English III

Students in this course focus on vocabulary, close reading, critical thinking, and analysis in diverse, multi-genre, thematic units from British literature sources. Students engage in the embedded research process and use the writing process to compose multiple texts employing appropriate revising and editing conventions.

English Literature & Composition – Advanced Placement Course #: 01120450
Recommended Grade Placement: 12 1 Credit
Prerequisite: English III (AP English III highly recommended)

English Literature and Composition Advanced Placement aligns to an introductory college-level literature and writing course which is designed to prepare the motivated student to achieve success on the AP English Literature and Composition Exam. At the senior level, AP students focus on developing the skills of critical literary analysis and composition as they repeatedly analyze poetry and prose from various time periods. Students compose expository, analytical, and argumentative essays that require them to analyze and interpret literary works. This course requires extensive reading, writing, and preparation outside of the regular school day and satisfies the English IV graduation requirement. **Students enrolled in Advanced Placement courses are required to take the Advanced Placement exam for each course in order to receive credit.** *AP courses receive weighted GPA credit.*

University Of Texas OnRamps English III/IV Course #: 01110315
Recommended Grade Placement: 11 or 12 1 Credit
Prerequisite: English II and/or English III

OnRamps English is a course in argumentation that situates rhetoric as an art of civic discourse. It is designed to enhance the student's ability to analyze the various positions held in any public debate and to advocate the student's position effectively. The student will also explore the ethics of argumentation, explaining what it means to "fairly" represent someone with whom you disagree, or how to responsibly address a community with particular values and interests. The student will have a university-level learning experience while still in high school and the opportunity to earn college credit. *Dual enrollment courses receive weighted GPA credit.*

English IV - College Prep for English Course #: 11229315
Recommended Grade Placement: 12 1 Credit
*Prerequisite: **(Recommended, not required):** Satisfactory performance on the English I and II STAAR/EOC exams and successful course completion of English III*

Students in this course investigate academic texts, construct supported interpretations and arguments for an authentic audience, and acquire academic habits of thought. Reading instruction focuses on students' developing critical reading skills for comprehension, interpretation, and analysis. To integrate reading and writing, students use an inquiry approach to analyze, synthesize, and make value judgments regarding text and writing. Successful completion of this course is defined by the memorandum of understanding (MOU) with the partnering institution Tarrant County College (TCC). *This course is recommended for any student whose performance outlined in TEC 28.014 indicates the student is not on track to perform entry-level college coursework in English Language Arts.*

Journalism Course: 01220600
Recommended Grade Placement: 9-12 1 Credit

This course represents an overview of the field of journalism and is a writing intensive and critical thinking course. Students should have a good foundation in writing. Topics covered include the history of the American media; fundamentals of news; feature, sports and editorial writing; introductions to newspaper editing, layout and design; desktop publishing; yearbook production; and students who take this course may qualify to apply for any of the Advanced Journalism classes upon instructor approval.

Photojournalism Course #: 01220650
Recommended Grade Placement: 9-12 ½ Credit

This course offers students the opportunity to explore the fundamentals of photography with a journalistic angle. This semester course provides the basic instruction in camera techniques as related to journalism, darkroom techniques or digital editing techniques, and photo composition. Students will practice techniques of taking photographs, developing film, and printing pictures. Students with high achievement may be selected for Newspaper and/or Yearbook staff and are expected to take pictures at school related events after school and on weekends. UIL and other competitions are strongly encouraged. Students must provide their own digital camera, batteries, and flash for the course.

Advanced Broadcast Journalism I - III Course #: 01220640,
Recommended Grade Placement: 10-12 01220645, 01220646
Prerequisite: Journalism 1 Credit

This course offers students the opportunity to explore the fundamentals of radio and television broadcasting with a journalistic angle. Students will practice techniques of planning, producing, directing, editing, and finalizing audio and video segments. Skills stressed are video graphic composition, lighting, organization, collaboration work, and creative/technical editing. Students will learn to write in broadcast style using scripts and storyboards. UIL and other competitions are strongly encouraged. Students may produce the daily announcement news show and many other video and audio productions.

Advanced Journalism - Newspaper I - III Course #: 01220621,
Recommended Grade Placement: 10-12 01220622, 01220623
Prerequisite: Journalism 1 Credit

These courses are concerned primarily with publishing a school newspaper. Students study all phases of journalism including desktop publishing programs. Improving writing skills and interviewing techniques are major concerns as is all types of communication. Also included is advanced study of feature, column, editorial and sports writing. Students must apply and follow instructor guidelines. UIL and other competitions are strongly encouraged. Students will generate revenue through advertising to support the costs of newspaper production. Students must also be able to work after school and at school related events on weekends to complete deadlines.

Advanced Journalism - Yearbook I - III Course #: 01220671,
Recommended Grade Placement: 10-12 01220672, 01220673
Prerequisite: Journalism 1 Credit

This course provides the student with opportunities to study elements and processes of producing the school yearbook. Students will complete layouts, write copy, and incorporate pictures and artwork on desktop publishing programs. Other skills stressed include: page planning/design, advertising sales, and photojournalism. Students should have a good foundation in writing. Students must apply and be willing to follow instructor guidelines. Students must attend a summer workshop and be willing to work a minimum of 15 hours a week outside of class to complete pages for a deadline. Students must be able to multitask and work on strict deadlines. UIL and other competitions are strongly encouraged.

Bible As Literature Course #: 01220720
Recommended Grade Placement: 10-12 ½ Credit

Students in this elective enrichment course learn biblical content, characters, poetry, and narratives that are prerequisites to understanding contemporary society and culture, including literature, art, music, mores, oratory, and public policy. Students familiarize themselves with the history and literary style of the Hebrew Scriptures (Old Testament) and New Testament and the influence of each on law, history, government, literature, art, music, customs, morals, values, and culture. Students also apply the foundational skills of organization, critical thinking, reading, and writing.

Creative Writing Course #: 01220700
Recommended Grade Placement: 11-12 ½ Credit
Prerequisite: English II

Students in this elective course participate in an intensive writers' workshop environment. Strategies and activities include practice with and examination of a variety of genres, including short stories and poetry, development of peer and self-editing techniques, and numerous opportunities to publish. This writing course is designed especially to challenge the imagination and creativity of the student by encouraging spontaneity of expression. *This course receives weighted GPA credit.*

Literary Genres – Women's Studies Course #: 01220735
Recommended Grade Placement: 11-12 ½ Credit
Prerequisite: English II

Students in this elective course analyze the literary and film genres written about and by women. Works include both classical and contemporary selections, ranging from Greek and Roman writers to contemporary authors, such as Toni Morrison, Annie Dillard, Judith Viorst, Barbara Kingsolver, Maya Angelou, Amy Tan, Alice Walker, Gloria Steinem, and Betty Freidan. Students explore the history and culture of women throughout history as well as the dynamics of the American Women's Movement of the 60s and 70s. Students also explore the emotional, financial, legal, and political status of women in the world today. *This course receives weighted GPA credit.*

Humanities I – The 1960s Course #: 01220800
Recommended Grade Placement: 10-12 ½ Credit

This is an interdisciplinary course in which students recognize writing as an art form. It includes the study of the art, music, literature, social and political events of the 1960s. Humanities is a rigorous advanced academic course of study in which high school students respond to aesthetic elements in texts and other art forms through outlets such as discussions, journals, oral interpretations, and dramatizations. A companion to this course is Analysis of Visual Media. *This course receives weighted GPA credit.*

Humanities II – Analysis Of Visual Media Of The 1960s Course #: 01220850
Recommended Grade Placement: 11-12 ½ Credit
Prerequisite: Humanities I

In this second semester course, Students will analyze the decade of the 1960s through the study of film, magazines, books, and works of art. Students will be expected to develop and present a major multimedia project. A companion to this course is Humanities. *This course receives weighted GPA credit.*

Competitive Speech Course #: 01220591
Recommended Grade Placement: 10-12 1 Credit

This class will focus on the academics of speech, oral interpretation, poetry, prose, original oratory, humorous interpretation, and impromptu speaking. In order to have full participation in the democratic process, students must have a good understanding of public dialogue. Students must learn the concepts and skills related to preparing and presenting public messages and to analyzing and evaluating the messages of others.

Debate I Course #: 01220571
Recommended Grade Placement: 9-12 1 Credit

Gaining a general understanding of the major forms of debate, learning to prepare and present actual debates, and studying logic and reasoning are the objectives of this course in argumentation. Students are introduced to both Lincoln Douglas and Policy debate techniques. Focus will be on research skills and critical thinking in order to prepare for UIL and TFA/NFL competition. The competitive debate teams will be formed in these classes.

Debate II Course #: 01220572
Recommended Grade Placement: 10-12 1 Credit

Gaining a general understanding of the major forms of debate, learning to prepare and present actual debates, and studying logic and reasoning are the objectives of this course in argumentation. Students continue to use both Lincoln Douglas and Policy debate techniques. Focus will be on research skills and critical thinking in order to prepare for UIL and TFA/NFL competition. The competitive debate teams will be formed in these classes. Debate II builds on the fundamentals and continue to develop debate skills. Scholarships may be earned by UIL and TFA competitions.

Debate III Course #: 01220573
Recommended Grade Placement: 11-12 1 Credit

Gaining a general understanding of the major forms of debate, learning to prepare and present actual debates, and studying logic and reasoning are the objectives of this course in argumentation. Students continue to use both Lincoln Douglas and Policy debate techniques. Focus will be on research skills and critical thinking in order to prepare for UIL and TFA/NFL competition. The competitive debate teams will be formed in these classes. Scholarships may be earned by UIL and TFA competitions. ***This course receives weighted GPA credit.***

Public Speaking I Course #: 01220551
Recommended Grade Placement: 10-12 1 Credit

Public Speaking I-III are advanced speech courses designed for those students interested in competitive forensic activities who wish to compete in Texas Forensic Association and UIL public speaking tournament events. Students will develop advanced communication skills through informative and persuasive speaking, modern oratory, domestic and foreign extemporaneous speaking, argumentation and debate, and various oral interpretation events. Scholarships may be earned by UIL and TFA competitions. *Students enrolled in this course will be required to attend tournaments.*

Public Speaking II Course #: 01220552
Recommended Grade Placement: 11-12 1 Credit

Public Speaking I-III are advanced speech courses designed for those students interested in competitive forensic activities who wish to compete in Texas Forensic Association and UIL public speaking tournament events. Students will develop advanced communication skills through informative and persuasive speaking, modern oratory, domestic and foreign extemporaneous speaking, argumentation and debate, and various oral interpretation events. Scholarships may be earned by UIL and TFA competitions. *Students enrolled in this course will be required to attend tournaments.*

Public Speaking III Course #: 01220553
Recommended Grade Placement: 12 1 Credit

Public Speaking I-III are advanced speech courses designed for those students interested in competitive forensic activities who wish to compete in Texas Forensic Association and UIL public speaking tournament events. Students will develop advanced communication skills through informative and persuasive speaking, modern oratory, domestic and foreign extemporaneous speaking, argumentation and debate, and various oral interpretation events. Scholarships may be earned by UIL and TEA competitions. *Students enrolled in this course will be required to attend tournaments.*

College Readiness and Study Skills Course #: 01220750
Recommended Grade Placement: 9-10 ½ Credit

The purpose of the College Readiness and Study Skills course is to sharpen reading skills and hone study/note taking skills through cross-curricular reading. This course will help prepare students for college level work including high school AP and Pre-AP courses and will be helpful for ESL students. This course will be a companion to the Practical Writing Skills course.

Practical Writing Skills Course #:01220775
Recommended Grade Placement: 10 ½ Credit

This course will complement the writing skills learned in English I and II by preparing students for various types of communication for school, the job market, as well as higher education. This course will emphasize the mechanics and conventions of writing and will help students apply English grammar appropriately and effectively. The Practical Writing Skills course will be a companion to the College Readiness and Study Skills course.

Mathematics

Algebra I Course #: 02090100

Recommended Grade Placement: 9 1 Credit

Prerequisite: 8th Grade Math or its equivalent

In this course, students will deepen their understanding of functions to explore function families, including linear, exponential, quadratic, and absolute value. Linear relationships will be studied in depth, including linear functions, linear equations, linear inequalities, and systems of linear equations and inequalities. Students will also deepen their understanding of power properties, exponential functions, and applications of exponential functions. Quadratic functions and quadratic equations will also be explored.

Algebra I Honors Course #: 02220175

Recommended Grade Placement: 9 1 Credit

Prerequisite: 8th grade math or equivalent

In this course, students will deepen their understanding of functions to explore function families, including linear, exponential, quadratic, and absolute value. Linear relationships will be studied in depth, including linear functions, linear equations, linear inequalities, and systems of linear equations and inequalities. Students will also deepen their understanding of power properties, exponential functions, and applications of exponential functions. Quadratic functions and quadratic equations will also be explored. Students will extend their learning in this Honors class by applying their knowledge to a series of performance tasks. Honors courses receive weighted GPA credit.

Algebra Lab Course #: 11090125

Recommended Grade Placement: 9 1 Local Credit

Prerequisite: 8th grade math or its equivalent

Algebra Lab is a program designed for students who are more than one year below grade level on a standardized achievement test and failed to demonstrate mastery on one or more areas of the most recent state assessment test. The course will cover the same material as Algebra I; however, the pace of the class will be geared to allow for mastery of the material. Abstract concepts will be introduced through the use of manipulatives. Successful completion of the course will result in 1 local credit for the Lab. *Local credits will not be used in calculating GPA.*

Geometry Course #: 02100200

Recommended Grade Placement: 10 1 Credit

Prerequisite or Corequisite: Algebra I

In this course, students will deepen their understanding of geometric concepts that they began to develop in middle school. Students will begin by reasoning algebraically to verify simple geometric theorems. Students will then deepen their understanding of congruence by constructing and deconstructing shapes, and defining the line and angle relationships that will ultimately justify congruence. Students will then develop a stronger understanding of similarity and proportionality using new strategies including trigonometric ratios. Students will explore circles and their attributes, including cross sections, and will use that knowledge to develop a better understanding of volume. Finally, students will use probability to determine the likelihood of certain outcomes, or end results. Proofs will be utilized throughout the year so that students can build a strong understanding of all these geometric concepts.

Geometry Honors Course #: 02090275

Recommended Grade Placement: 9-10 1 Credit

Prerequisite or Corequisite: Algebra I

In this course, students will deepen their understanding of geometric concepts that they began to develop in middle school. Students will begin by reasoning algebraically to verify simple geometric theorems. Students will then deepen their understanding of congruence by constructing and deconstructing shapes, and defining the line and angle relationships that will ultimately justify congruence. Students will then develop a stronger understanding of similarity and proportionality using new strategies including trigonometric ratios. Students will explore circles and their attributes, including cross sections, and will use that knowledge to develop a better understanding of volume. Finally, students will use probability to determine the likelihood of certain outcomes, or end results. Proofs will be utilized throughout the year so that students can build a strong understanding of all these geometric concepts. Students will extend their learning in this Honors class by applying their knowledge to a series of performance tasks. Honors courses receive weighted GPA credit.

Algebra II Course #: 02110300
Recommended Grade Placement: 10-11 1 Credit
Prerequisite: Algebra I

A continuation of the topics studied in Algebra I, this course will extend the development of the real number system and will include a study of the complex numbers as a mathematical system. Students will study the ideas of relations and functions, with an emphasis on graphing; a variety of representations as well as a variety of techniques (including the graphing calculator) will be used to solve problems. Matrices and determinants will be introduced. The equations and graphs of conic sections will also be studied. The students who plan to attend college should study Algebra II since familiarity with mathematical concepts and an understanding of a structured approach to a discipline will be needed.

University of Texas OnRamps College Algebra (Advanced Algebra II) Course #: 02220401
Recommended Grade Placement: 10-11 1 Credit

This course replaces Pre-AP Algebra II beginning in the 2022-2023 school year.

In this course, students deepen their critical thinking skills and develop their ability to persist through challenges as they explore function families: Linear, Absolute Value, Quadratic, Polynomial, Radical, Rational, Exponential, and Logarithmic. Students analyze data algebraically and with technology while developing their knowledge of properties of functions, matrices and systems of equations, and complex numbers. The pedagogy of the course, Inquiry-Based Learning, encourages students to take an active role in the construction of their learning. This learning will be accomplished by abstraction, generalization, problem-solving, and modeling. Students will experience high quality curriculum designed by the faculty of the University of Texas at Austin. The student will have a university-level learning experience while still in high school with the opportunity to earn college credit. *Dual enrollment courses receive weighted GPA credit.*

Algebraic Reasoning Course #: 02100280
Intended Grade Placement: 10 1 Credit
Prerequisite: Algebra I

In Algebraic Reasoning, students will continue to build the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses. Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness such as probes, measurement tools, and software tools, including spreadsheets.*This course is intended for sophomore students who did not pass the Algebra I STAAR EOC.*

Pre-Calculus Course #: 02110400
Recommended Grade Placement: 11-12 1 Credit
Prerequisites: Algebra I, Geometry and Algebra II

Pre-Calculus is a comprehensive study of the properties and applications of trigonometric functions, including trigonometric ratios, their graphs, identities, and inverse functions. Other topics include conic sections, polynomial functions, exponential functions, logarithmic functions, sequences and series, complex numbers, and vectors. Students will experience a more in-depth study of the previously mentioned topics.

University of Texas OnRamps Pre-Calculus (Advanced Pre-Calculus) Course #: 02220400
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Geometry and Algebra II

This course replaces Pre-AP Pre-Calculus beginning in the 2022-2023 school year.

In "Discovery Precalculus-A Creative and Connected Approach," students deepen and extend their knowledge of functions, graphs, and equations from their high school algebra and geometry courses so that they can successfully work with the concepts in a rigorous university-level calculus course. This course is designed to push students well beyond "drill and kill" type exercises, with an emphasis on unpacking mathematical definitions and making logical arguments to their peers. Students will experience high quality curriculum designed by the faculty of the University of Texas at Austin. The student will have a university-level learning experience while still in high school *with the opportunity to earn college credit.* ***Dual enrollment courses receive weighted GPA credit.***

Pre-Calculus – Advanced Placement Course #: 02220300
Recommended Grade Placement: 11-12 1 Credit
Prerequisites: Algebra I, Geometry and Algebra II

In AP Precalculus, students explore everyday situations and phenomena using mathematical tools and lenses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. They will learn how to observe, explore, and build mathematical meaning from dynamic systems, an important practice for thriving in an ever-changing world. This course prepares students for other college-level mathematics and science courses. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Advanced Quantitative Reasoning (AQR) Course #: 02120575

Recommended Grade Placement: 12 1 Credit

Prerequisite: Geometry and Algebra II

This course was developed as a fourth-year math course. Its primary purpose is to prepare students for non-math-intensive college majors, technical training, or for a range of career options in the workplace. The primary focus includes the analysis of information using statistical methods and probability, modeling change and mathematical relationships, mathematical decision making in finance and society, and spatial and geometric modeling for decision making. Students will learn to become critical consumers of the quantitative data that surround them every day, knowledgeable decision makers who use logical reasoning, and mathematical thinkers who can use their quantitative skills to solve problems related to a wide range of situations.

College Prep for Math Course #: 11229310

Recommended Grade Placement: 12 1 Credit

*Prerequisite: **(Recommended, not required)** Satisfactory completion of Algebra I and the Algebra I EOC exam, Geometry, and a third credit of mathematics*

The goal of this course is to develop students' quantitative and algebraic reasoning abilities, thus preparing them for college success. This course addresses a variety of mathematical topics such as numeric reasoning, functions, geometric reasoning, probabilistic reasoning, and problem solving. This course is designed to prepare students for college-level mathematics intensive courses. Successful completion of this course, as defined by the memorandum of understanding (MOU) with the partnering institution, Tarrant County College (TCC), grants the student an exemption to the TSI requirements for mathematics at TCC. *This course is recommended for any 12th grade students whose performance outlined in TEC 28.014 indicates the student is not on track to perform entry-level college coursework in Mathematics.*

Statistics Course #: 02120750

Recommended Grade Placement: 12 1 Credit

Prerequisite: Algebra I

In this course, students will broaden their knowledge of variability and statistical processes. Students will study sampling and experimentation, categorical and quantitative data, probability and random variables, inference, and bivariate data. Students will connect data and statistical processes to real-world situations. In addition, students will extend their knowledge of data analysis.

Statistics – Advanced Placement Course #: 02120800

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Pre-calculus or concurrent enrollment in AP Statistics and Pre-Calculus

AP Statistics is a course offered to students who wish to complete studies in secondary school equivalent to a one semester, introductory, non-calculus based college course in statistics. The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad themes: 1) exploring data, 2) planning a study, 3) anticipating patterns, 4) statistical inference. Students who successfully complete the course and the exam may receive credit and/or advanced placement for a one-semester introductory college statistics course. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

University of Texas OnRamps Statistics Course #: 02220402
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Algebra II

Basic probability and data analysis for the sciences. Subjects include randomness, sampling, distributions, probability models, inference, regression, and nonlinear curve fitting. Students will experience high quality curriculum designed by the faculty of the University of Texas at Austin. The student will have a university-level learning experience while still in high school with the opportunity to earn college credit. ***Dual enrollment courses receive weighted GPA credit.***

Calculus - Advanced Placement AB Course #: 02120625
Recommended Grade Placement: 12 1 Credit
Prerequisite: Pre-calculus or Pre-calculus Pre-AP

Advanced Placement Calculus AB consists of a full academic year of work in calculus and related topics comparable to one semester of calculus in colleges and universities. It is expected that students who take AP Calculus will seek college credit or placement from institutions of higher learning. The year's course will be devoted to the topics in differential and integral calculus to adequately prepare students for the Advanced Placement Calculus AB examination. This course requires a graphing utility. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Calculus – Advanced Placement BC Course #: 02120650
Recommended Grade Placement: 12 1 Credit
Prerequisite: Pre-calculus or Pre-calculus Pre-AP

Advanced Placement Calculus BC consists of a full academic year of work in calculus and related topics comparable to two semesters of calculus in colleges and universities. It is expected that students who take AP Calculus will seek college credit or placement from institutions of higher learning. The year's course will be devoted to the topics in differential and integral calculus, as well as vectors, slope fields, polynomial approximations, and series to adequately prepare students for the Advanced Placement Calculus BC examination. This course requires a graphing utility. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Discrete Mathematics For Computer Science Course #: 07121990
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Algebra I & Geometry

Discrete Math provides the tools used in most areas of computer science. Mathematical topics are interwoven with computer science applications to enhance students' understanding of the introduced mathematics. Students will develop the ability to see computational problems from a mathematical perspective. Introduced to a formal system upon which mathematical reasoning is based, students will acquire the necessary knowledge to read and construct mathematical arguments (proofs), understand mathematical statements (theorems), and use mathematical problem-solving tools and strategies. Students will be introduced to discrete data structures such as sets, discrete functions, and relations and graphs and trees. Students will also be introduced to discrete probability and expectations.

Statistics & Risk Management Course #: 07222490

Recommended Grade Placement: 11-12 1 Credit

Approved for math credit from State Board of Education | Prerequisite: Accounting I and Algebra II

Students will use a variety of graphical and numerical techniques to analyze patterns and departures from patterns to identify and manage risk that could impact an organization. Students will use probability as a tool for anticipating and forecasting data within business models to make decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid.

Mathematical Applications In Agriculture, Food & Natural Resources Course #: 07121980

Recommended Grade Placement: 10-12 1 Credit

Approved for math credit from State Board of Education | Prerequisite: At least one prior Agriculture, Food, and Natural Resources course, and must be taken after or concurrently with Algebra II to use for fourth math credit.

In this course, students will apply academic skills in mathematics, including algebra, geometry, and data analysis in the context of agriculture, food, and natural resources. To prepare for success, students are afforded opportunities to reinforce, apply, and transfer their knowledge and skills related to mathematics in a variety of contexts.

Financial Mathematics Course #: 07222460

Recommended Grade Placement: 11-12 1 Credit

Approved for math credit from State Board of Education | Prerequisite: Algebra I

In this course, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem solving model that incorporates analyzing given information, formulating a plan or strategy, determining a 3 solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, and number sense to solve problems. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

Mathematics for Medical Professionals Course #: 07226470

Recommended Grade Placement: 11-12 1 Credit

Prerequisites: Geometry and Algebra II

The Mathematics for Medical Professionals course is designed to embed statistics, probability, and finance, while focusing on fluency and solid understanding in medical mathematics. Students will extend and apply mathematical skills necessary for health science professions. Course content consists primarily of high school level mathematics concepts and their applications to health science professions.

Math-Oriented Courses

In Crowley ISD, all high school students are required to take four years of math. The following courses utilize mathematical concepts and processes which help students practice important skills. The courses listed will satisfy the Crowley ISD requirement for math-oriented courses following completion of the Mathematics graduation requirements. **Students planning to attend a 4-year university should strongly consider taking a math course during their senior year to be fully prepared for the rigor of college math courses, such as OnRamps Pre-Calculus, Statistics, AP Statistics, OnRamps Statistics, AP Calculus AB or AP Calculus BC.**

Music Theory I or II AP
Computer Science I, II, III
Accounting I or II
Adv. Int. Design/Practicum
Adv. Arch. Design/Practicum
Practicum in Health Science
Culinary Arts I, Practicum or Adv. Culinary Arts
Cosmetology II
Agricultural Mechanics & Metal Technology
Agricultural Power Systems
Agricultural Structural Design & Fabrication
Agricultural Equipment Design & Fabrication
Civil Engineering & Architecture
Construction Technology II
Practicum in Construction Technology
Practicum in Graphic Design & Illustration
Pharmacology
Practicum in Information Technology
Computer Technician Practicum
Networking

Introduction to Engineering
Digital Electronics
Engineering Science
Engineering Design & Development
Career Preparation or Practicum Courses
AP Physics
AP Chemistry
AP Computer Science
Aerospace Engineering
Practicum in Law, Public Safety, Corrections & Security
Emergency Medical Technician
Geographical Information Systems
Raster Based Geographical Information Systems
Spatial Technology and Remote Sensing
Practicum in STEM
Cybersecurity Capstone
Automotive Technology II
Practicum in Transportation Systems
Aircraft Powerplant Technology
Practicum in Distribution & Logistics

Science

All science classes are required to dedicate at least 40% of instructional time to students conducting laboratory and field investigations utilizing safe, environmentally appropriate, and ethical practices.

Biology Course #: 03090100
Recommended Grade Placement: 9-11 1 Credit

In Biology, students will conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Biology topics include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; and ecosystems and the environment.

Honors Biology Course #: 03090175
Recommended Grade Placement: 9-11 1 Credit

This course is designed to develop the science proficiency skills needed to be successful in completing college level work in high school (OnRamps, Dual Credit, Advance Placement). Pre-AP Biology is a comprehensive study of: structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; ecosystems; and plants and the environment. This course is designed for the highly motivated student and utilizes content and activities that stress higher level thinking skills, a rigorous, in-depth and sophisticated laboratory-based approach and accelerated concept pacing.
Pre-AP courses receive weighted GPA credit.

Targeted Topics in Biology Course #: 03220380
Recommended Grade Placement: 10-12 1 Credit

Targeted Topics in Biology is intended to diversify programs of science study and give students the opportunity to study targeted scientific topics in Biology in greater detail and with deeper understanding to reach mastery of science content.

Integrated Physics/Chemistry (IPC) Course #: 03100300
Recommended Grade Placement: 9-10 1 Credit

This course covers the following topics: motion, waves, energy transformations, properties of matter, changes in matter and basic principles of chemistry. These topics are foundational before taking the subsequent math-dependent courses of chemistry and physics. This course is designed for students currently in Algebra 1. This course will fulfill the science credit requirement for the Recommended High School Plan, but not for the Distinguished Achievement Plan.

Chemistry Course #: 03100200

Recommended Grade Placement: 10-12 1 Credit

Prerequisite: Biology and Algebra I

Recommended Prerequisite: IPC and completion of/concurrent enrollment in Geometry or Algebra II

In Chemistry, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Chemistry topics include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our daily lives.

Honors Chemistry Course #: 03100250

Recommended Grade Placement: 10-12 1 Credit

Required Prerequisite: Biology and Algebra I (Pre-AP preferred)

Recommended Prerequisite: Completion of/concurrent enrollment in Geometry or Algebra II

This course is designed to develop the science proficiency skills needed to be successful in completing college level work in high school (OnRamps, Dual Credit, Advance Placement). Pre-AP Chemistry topics include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, nuclear chemistry, and scientific processes. This course is designed for the highly motivated student and utilizes content and activities that stress higher level thinking skills, a rigorous, in-depth and sophisticated laboratory-based approach and accelerated concept pacing. ***Pre-AP courses receive weighted GPA credit.***

Physics Course #: 03110400

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Biology, IPC or Chemistry, Algebra I

Recommended Prerequisite: completion of/concurrent enrollment in Geometry or Algebra II

In Physics, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: laws of motion; changes within physical systems and conservation of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. This course is designed for college-bound students preparing for non-science-related careers that have successfully completed Algebra 1 and have completed or enrolled in Geometry or Algebra II.

Aquatic Science Course #: 03220810

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Biology

Recommended Prerequisite: Chemistry (may be concurrently enrolled)

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

Astronomy Course #: 03220910

Recommended Grade Placement: 11-12 1 Credit

Recommended Prerequisite: Biology

In Astronomy, students conduct laboratory and field investigations, use scientific methods, and make informed decisions using critical thinking and scientific problem solving. Students study the following topics: astronomy in civilization, patterns and objects in the sky, our place in space, the moon, reasons for the seasons, planets, the sun, stars, galaxies, cosmology, and space exploration. Students who successfully complete Astronomy will acquire knowledge within a conceptual framework, conduct observations of the sky, work collaboratively, and develop critical-thinking skills.

Earth Systems Science Course #: 03220920

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: 3 Science courses (one may be taken concurrently) and 3 Mathematics courses (one may be taken concurrently)

Earth and Space Science is a rigorous capstone course designed to build on a student's prior scientific and academic knowledge and skills to develop understanding of Earth's system in space and time. Earth and space science has themed topics of study which include: Earth in Space and Time (Earth history), Solid Earth (the complex, interacting, dynamic subsystems linking Earth's interior to its surface), Fluid Earth, (hydrosphere, atmosphere, and cryosphere). There are three strands that are used throughout each of the themes which are: Systems, Energy and Relevance.

Environmental Systems Course #: 03220800

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Biology and IPC or Physics

In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Environmental systems topics 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.

Biology – Advanced Placement Course #: 03120500

Recommended Grade Placement: 11-12 1 Credit

Prerequisites: Biology, Chemistry (successful completion of both Pre-AP courses recommended) |This course will satisfy the 4th Science requirement.

The AP Biology course is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Chemistry – Advanced Placement Course #: 03120600

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Pre-AP Chemistry (recommended) or Chemistry, successful completion of or concurrent enrollment in Algebra II strongly recommended | This course will satisfy 4th Science requirement

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Environmental Science – Advanced Placement Course #: 03220875

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Pre-AP Biology, Pre-AP Chemistry, and Algebra I | This course will satisfy 4th Science requirement

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Physics I: Algebra-Based - Advanced Placement Course #: 03120700

Recommended Grade Placement: 11-12 1 Credit

Prerequisites: Pre-AP Biology, Pre-AP Chemistry, Algebra I, Geometry, completion or concurrent enrollment in Algebra II or OnRamps College Algebra

AP Physics 1 is an algebra-based, introductory college-level physics course. This full year course is the equivalent of a first semester introductory college course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Physics II: Algebra Based - Advanced Placement Course #: 03120705

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: AP Physics I, Algebra II or OnRamps College Algebra, completion or concurrent enrollment in Pre-Calculus

AP Physics 2 is an algebra-based, introductory college-level physics course. This full year course is the equivalent of a second semester introductory college course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Physics C: Calculus Based – Advanced Placement Course #: 03120710

Recommended Grade Placement: 12 1 Credit

Prerequisite: Completion or concurrent enrollment in AP Calculus | This course will satisfy 4th Science requirement

AP Physics C is a calculus-based, college level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course focuses on mechanics and topics related to electricity and magnetism. Introductory differential and integral calculus are used throughout the course. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

University of Texas OnRamps Biology Course #: 03220390

Recommended Grade Placement: 12

Prerequisite: Biology and Chemistry (Pre-AP preferred)

Molecular and cellular biology is the focus of this introductory biology course. The course revolves around three big ideas of biology starting with the study of the structure and function of biomolecules. The flow of energy through living systems via photosynthesis and cellular respiration is the second big idea of the class. The course finishes with investigation of how genetic information is expressed and transmitted both within and between cells. The student will have a university-level learning experience while still in high school and the opportunity to earn college credit. ***Dual enrollment courses receive weighted GPA credit.***

University Of Texas OnRamps Chemistry Course #: 03220401

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Biology and Algebra I

Introduces students to the nature of matter and energy in the physical world. Throughout the course, students will learn to think like a scientist by seeing the underlying theoretical foundations for chemistry and making intuitive arguments for how the world works that are supported by quantitative measures. Built with an intention to bring in students from a variety of different backgrounds, students in the course will learn how to successfully study science by organizing their learning around mastery and ownership of materials. Students will experience high quality curriculum designed by the faculty of the University of Texas at Austin. The student will have a university-level learning experience while still in high school and the opportunity to earn college credit. ***Dual enrollment courses receive weighted GPA credit.***

University of Texas OnRamps Physics Course #: 03220400

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Biology, Algebra I, and Geometry

Recommended Prerequisite: Algebra II (may be concurrently enrolled)

An Algebra-based (non-calculus) technical course in mechanics that fulfills a general physics requirement. Students will develop problem solving proficiency, and be able to analyze physical situations involving motion, force, energy, rotations, heat, oscillations, waves, and sound. Students will experience high quality curriculum designed by the faculty of the University of Texas at Austin. The student will have a university-level learning experience while still in high school and the opportunity to earn college credit. ***Dual enrollment courses receive weighted GPA credit.***

The courses listed below are CTE courses that are approved by the State Board of Education for 4th Science credit.

Advanced Animal Science Course #: 07221225

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board of Education for 4th Science credit | Prerequisite: Biology and Chemistry or IPC; Algebra and Geometry; and Small Animal Management, Equine Science or Livestock Production

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

Advanced Plant & Soil Science Course#: 0722168

Recommended Grade Placement: 11-12 1 Credit

Approved by State Board of Education for 4th Science credit | Prerequisite: Biology, IPC, Chemistry or Physics and 1 credit from the Agriculture, Food, and Natural Resources Career Cluster

Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. To prepare for careers in plant and soil science, students must attain academic skills and knowledge, acquire technical knowledge and skills related to plant and soil science and the workplace.

Anatomy And Physiology Course #: 03120900

Recommended Grade Placement: 11-12 1 Credit

Approved by State Board of Education for 4th Science credit | Prerequisite: Biology and Chemistry

Recommended Prerequisite: 1 course from the Health Science Career Cluster

The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis. The goal of this course is to better prepare students for undergraduate work in life science majors such as pre-medical or pre-dental studies.

Food Science Course #: 07225890

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board of Education for science credit | Prerequisite: Biology, Chemistry and 1 other science course. Recommended Prerequisites: Principles of Hospitality and Tourism

In Food Science, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public.

Forensic Science Course #: 07229300

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board of Education for 4th science credit | Prerequisite: Biology and Chemistry
Recommended Pre/Corequisites: Any Law, Public Safety, Corrections, and Security Career Cluster course

Forensic Science is a course that introduces students to the application of science to connect a violation of law to a specific criminal, criminal act, or behavior and victim. Students will learn terminology and procedures related to the search and examination of physical evidence in criminal cases as they are performed in a typical crime laboratory. Using scientific methods, students will collect and analyze evidence such as fingerprints, bodily fluids, hairs, fibers, paint, glass, and cartridge cases. Students will also learn the history and the legal aspects as they relate to each discipline of forensic science.

Medical Microbiology Course #: 07226410

Recommended Grade Placement: 10-12 1 Credit

Approved by the State Board of Education for 4th science credit | Prerequisite: Biology and Chemistry
Recommended Pre/Corequisites: Pathophysiology or another course from the Health Science Career Cluster

The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases.

Pathophysiology Course #:07226400

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board of Education for 4th science credit | Prerequisite: Biology, Chemistry
Recommended Pre/Corequisite: Medical Microbiology or another course from the Health Science Career Cluster

The Pathophysiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology will study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.

Social Studies

World Geography Course #: 04090100
Recommended Grade Placement: 9 1 Credit

World Geography is the study of the earth, its regions, and the people who live in these regions. Students will study the topography, weather, and climate of each region as well as the languages, customs, and ways of living of the people who inhabit these regions. In addition, the interaction of people with the environment and with each other will be studied. Students will become familiar with the relative locations of the world's continents, oceans, and countries and will learn to use maps, charts, graphs, and other methods of research used by geographers.

Human Geography – Advanced Placement Course #: 04220175
Recommended Grade Placement: 9 1 Credit

The purpose of the AP Human Geography course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. On successful completion of the course, students should have developed skills that enable them to: *Use and think about maps and spatial data, Understand and interpret the implications of associations among phenomena in places, Recognize and interpret at different scales the relationships among patterns and processes, Define regions and evaluate the regionalization process, and Characterize and analyze changing interconnections among places.* **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

World History Course #: 04100200
Recommended Grade Placement: 10 1 Credit

This is the story of man, his civilization and culture, his ideas and institutions from the primitive beginnings to present global challenges. It traces geopolitical, economic, and social experiences of mankind and applies them to the present. Students trace the development of Western civilization and its relationships to other great world cultures. A study of contemporary world affairs becomes an essential element of the course, as does the achievements of man in his total cultural setting.

World History – Advanced Placement Course #: 04100275
Recommended Grade Placement: 10 1 Credit
Recommended Prerequisite: AP Human Geography

AP World History is a one-year college-level course that examines the evolution of global processes and contacts, in interaction with different types of human societies from the earliest human societies to the present. The course highlights the impact of geography, culture, trade, religion and technology during selected historical periods. A major emphasis in this course is the extent to which contact between societies resulted in the diffusion of ideas and the impact of this interaction across geographic regions with a primary focus on non-Europeans societies. AP courses in the Social Sciences cover a greater breadth of factual information and are heavily geared towards research methodology and analysis. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Ethnic Studies: Native American Studies Course #: 04220809
Recommended Grade Placement: 10-12 1 Credit

Native American Studies is designed to assist students in understanding issues and events from American Indian/Native perspectives and should be presented in a manner in which each Native Nation studied is given the same independence and sovereignty as a foreign nation. This course is a survey course of Nations in what is now known as the United States and Texas that develops an understanding of the roots of American Indian/Native cultures, especially as it pertains to social, economic, and political interactions within the broader context of North American history. It requires an analysis of important ideas, social and cultural values, beliefs, and traditions. Knowledge of how past events affect the present provides students of the 21st century with a broader context within which to address the many triumphs and challenges of American Indian/Native communities in the United States today.

Ethnic Studies: Mexican American Studies Course #: 04220804
Recommended Grade Placement: 10-12 1 Credit

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

Ethnic Studies: African American Studies Course #: 04220806
Recommended Grade Placement: 10-12 1 Credit

African American studies is a conceptually driven course that introduces students to the exploration of the rich and diverse history of African Americans. The goal of this course is to broaden students' knowledge and understanding of the history, citizenship, culture, economics, science, technology, geography, and political realities of African Americans. The historical content of this course is taught with relevance to contemporary and current issues to ensure a personal connection and deep understanding for students.

African American Studies – Advanced Placement Course #: 04220807 (Sem 1); 04220808 (Sem 2)

Recommended Grade Placement: 10 - 12 1 Credit

AP African American Studies is a one year look at the history, politics, culture, and economics of North American people of African descent. From the slave economy to the civil rights movement, and from the blues to hip-hop, this course will examine the role that African Americans have had in shaping American society and culture. Topics will include historical hardships faced by African Americans and modern issues including educational opportunities. Scholars in African American studies focus on people and viewpoints that have been ignored in other fields and integrate minority experiences into all academic subjects. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

U.S. History Since Reconstruction Course #: 04110300

Recommended Grade Placement: 11 1 Credit

This is a history of the Credited States from Reconstruction through the present: reconstruction, populism and progressivism, the twenties and the New Deal, the world wars, the cold war period, the Vietnam war, the Watergate era, etc. Consideration is given to various aspects of Credited States history including economic patterns, foreign involvement, cultural and political attitudes, and a chronological overview of the history of the Credited States. Research and geographic skills are developed.

U.S. History – Advanced Placement Course #: 04110350

Recommended Grade Placement: 11 1 Credit

Recommended Prerequisite: AP World History / AP Government / AP Economics

Designed for juniors demonstrating advanced aptitude in social studies, this course prepares students for intermediate and advanced college courses equivalent to those of full-year introductory college courses. Students may qualify for college credit based on AP test scores. AP U.S History covers American history from its earliest history to the present. This course is designed to give students the analytical skills and factual knowledge necessary to deal critically with problems and materials in American history from colonization to the present. Students assess historical data, interpret problems, weigh evidence, and arrive at conclusions presented in historical scholarship. Both oral and written skills are used extensively. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

University of Texas OnRamps U.S. History Course #: 04110315

Recommended Grade Placement: 11 1 Credit

This course surveys American history from the colonial period through the civil war during the first semester and from the end of the civil war through modern times during the second semester. Students will experience a high quality curriculum designed by the faculty of the University of Texas at Austin. The student will have a university-level learning experience while still in high school and the opportunity to test for college credit. ***Dual enrollment courses receive weighted GPA credit.***

U.S. Government Course #: 04120400
Recommended Grade Placement: 12 ½ Credit

Students in this course examine political theory/application and governmental structures/functions at national, state, and local levels. Content includes a study of the U.S. Constitution, background, political parties, political participation, Congress, the Presidency, comparative political systems, and the rights and responsibilities of American citizenship. *U.S. Government is typically paired with Economics for full credit.*

U.S. Government - Advanced Placement Course #: 04120450
Recommended Grade Placement: 12 ½ Credit
Recommended Prerequisites: AP Human Geography / Ap Macroeconomics

This course is designed for sophomores demonstrating advanced aptitude in Social Studies. It assists students to acquire a thorough and systematic comprehension of American government and politics based on an understanding of the facts, concepts, ideologies, institution, and political practices/ processes that comprise American political reality. It exceeds the regular course in both scope and depth of content. It prepares students for intermediate and advanced college courses by requiring performances equivalent to those of an introductory college course. Students may qualify for college credit based on their AP Test scores. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Economics with Emphasis on the Free Enterprise System Course #: 04120425
Recommended Grade Placement: 12 ½ Credit

Economics with Emphasis on the Free Enterprise System and Its Benefits emphasizes the American free enterprise system, government in the American economic system, American economic system and international economic relations, consumer economics, and social studies attitudes, values, and skills for citizenship. *Economics is typically paired with U.S. Government for full credit.*

Macroeconomics – Advanced Placement Course #: 04120475
Recommended Grade Placement: 12 ½ Credit
Recommended prerequisite: AP Human Geography/AP Government

The purpose of the AP Macroeconomics course is to give students an understanding of the free enterprise system with emphasis on the principles that apply to our capitalist economy as a whole. This course examines national income and price determination, economic performance measures, economic growth, money and banking, and international economics. The class develops an understanding of the role of government in setting and maintaining national economic goals. The textbook, content, and activities are college level, and students are encouraged to take the AP Macroeconomics exam for college credit. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Personal Financial Literacy and Economics Course #: 04220435
Recommended Grade Placement: 12 ½ Credit

This course provides a foundation in both microeconomics and macroeconomics. Students will survey the impact of demand, supply, various industry structures, and government policies on the market for goods, services, and wages for workers. Macroeconomic study involves economic systems with an emphasis on free

enterprise market systems, goals of full employment, price stability, and growth. The course requires that students demonstrate critical thinking by exploring how to invest in themselves with education and skill development, earn income, and budget for spending, saving, investing, and protecting. Students will examine their individual responsibility for managing their personal finances and understand the impact on standard of living and long-term financial well-being. **Students can only earn credit for EITHER the *Personal Financial Literacy and Economics* course OR the *Personal Financial Literacy* course but not for both. Please check with your counselor for more details.**

Personal Financial Literacy Course #: 04220430
Recommended Grade Placement: 10 - 12 ½ Credit

This elective course will develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lifestyles and understand personal financial responsibility. Students will be taught 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. This course includes instruction in methods of paying for college and other postsecondary education and training along with completing the application for federal student aid provided by the U.S. Department of Education. **Students can only earn credit for EITHER the *Personal Financial Literacy and Economics* course OR the *Personal Financial Literacy* course but not for both. Please check with your counselor for more details.**

Psychology Course #: 04220600
Recommended Grade Placement: 10-12 ½ Credit

Psychology is an elective course which encompasses broad areas of study about human behavior and it enables the students to better understand themselves and others. The goal of this course is to create active intellectual and emotional involvement by the student, not only in learning about the science of psychology, but in life as well.

Psychology - Advanced Placement Course #: 04220650
Recommended Grade Placement: 10-12 ½ Credit

This elective course is designed for students demonstrating strong aptitude in social studies skills and possessing an interest in Psychology. It exceeds the regular course in both scope and depth of content. It prepares students for intermediate and advanced college courses by requiring performances equivalent to those of an introductory college course. Students may qualify for college credit based on their AP Test scores. **Students should also be enrolled in Advanced Studies – Psychology for the spring semester as a continuation of the AP course. Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit. *AP courses receive weighted GPA credit.***

Advanced Studies - Psychology Course #: 04220960
Recommended Grade Placement: 10-12 ½ Credit
Prerequisite: Psychology - Advanced Placement

This elective course is a continuation of the AP Psychology course offered in the fall semester. It is meant to help complete the study of concepts begun in AP Psychology and help review and prepare students for the AP exam. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement**

exam for each course in order to receive credit. ***This course receives weighted GPA credit.***

Sociology Course #: 04220675
Recommended Grade Placement: 11-12 ½ Credit
Prerequisite: Completion of or concurrent enrollment in U.S. History

This elective course deals with the study of people and their interaction with one another. The processes of socialization are explained and are compared with other cultures. Students analyze cause and effects of social problems as well as cultural change in selected cultures. It involves learning about institutions found in all societies, such as the family, community organizations as well as political and social activities.

European History - Advanced Placement Course #: 04120500
Recommended Grade Placement: 11-12 1 Credit
Recommended Prerequisite: AP World History or AP U.S. History

This course is designed for students demonstrating strong aptitude in social studies skills and possessing an interest in European history. This course prepares students for introductory and advanced level courses at a four-year university. Students may earn college credit based on AP scores. The course covers European history from the Renaissance to the present. Analytical and writing skills are stressed. Students assess historical data, weigh evidence, interpret problems and study relationships between European countries and countries affected by western European historical development. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit. Counts as social studies elective for graduation plans.** ***AP courses receive weighted GPA credit.***

Comparative Government - Advanced Placement Course #: 04220452
Recommended Grade Placement: 11-12 ½ Credit

This course introduces students to concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. Students will study major concepts and focus on the specific politics of six countries: China, Great Britain, Iran, Mexico, Nigeria, and Russia. This course will help students understand the more abstract concepts by looking at concrete examples. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Languages Other than English (LOTE)

American Sign Language I Course #: 05221100
Recommended Grade Placement: 10 1 Credit

This course introduces the vocabulary and grammar of American Sign Language and fingerspelling. It also emphasizes the physical, social, and psychological aspects of the deaf experience. Upon completion, students will be able to demonstrate ASL word order, grammatical structures, and facial grammar in both signed and written form. Students also will be able to understand and carry on basic conversations.

American Sign Language II Course #: 05221200
Recommended Grade Placement: 11 1 Credit
Prerequisite: ASL I

This course will include additional vocabulary and more complex grammar of ASL. There will be an emphasis on fluency and culture.

American Sign Language III Course #: 05221300
Recommended Grade Placement: 12 1 Credit
Prerequisite: ASL II

This course continues signing and reading skill development using only sign language in the classroom with emphasis on grammar and fluency. Deaf literature and deaf culture will be studied and practiced.

French I Course #: 05222100
Recommended Grade Placement: 9 1 Credit

The instruction in beginning French begins with a strong emphasis on listening and speaking. However, reading and writing are quickly introduced. Upon completion of this course, students should be able to understand and carry on simple conversations based on greetings, introductions, family, home, school, daily routine, shopping, etc. They should learn the basic elements of grammar.

French II Course #: 05222200
Recommended Grade Placement: 10 1 Credit
Prerequisite: French I

A special emphasis on culture and grammatical structure is continued as the student develops listening and speaking skills in French. Students will expand basic vocabulary and focus on a more grammar-oriented approach to language study via simple written essays and short readings.

French II Pre-AP Course #: 05222250
Recommended Grade Placement: 10 1 Credit
Prerequisite: French I

This course is intended for the serious student who wishes to master the French language. An extensive emphasis on grammatical structure and aural/oral proficiency distinguishes this course from the regular section. Students will expand basic vocabulary and cultural knowledge of the francophone world via written essays, readings, and videos. Much of the class will be conducted in French. An average of 85 or higher in French I is highly recommended. ***Pre-AP courses receive weighted GPA credit.***

French III Pre-AP Course #: 05222300
Recommended Grade Placement: 11 1 Credit
Prerequisite: French II

This class is intended to bring the student a step closer to success on the College Board's Advanced Placement exam. It will be conducted in French. Speaking and writing will be equally emphasized. Grammatical skills are developed through daily written and oral practice in all verb tenses. The student will read French literature and write many timed essays. The study of Francophile culture continues via literature and film. An average of 85 or higher in French II Pre-AP is highly recommended. ***Pre-AP courses receive weighted GPA credit.***

French IV – Advanced Placement Course #: 05222400
Recommended Grade Placement: 12 1 Credit
Prerequisite: French III Pre- AP

The AP French program offers a course description and examination in the French language. The course is intended to be roughly equivalent both in content and difficulty to a college French language class at the advanced level. **Students enrolling in Advanced Academics Courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

German I Course # 05223100
Recommended Grade Placement: 9 1 Credit

This course is designed to introduce students to the fundamentals of speaking, reading, and writing German. Students will also be exposed to the customs and culture of Germany as well as other German speaking countries.

German II Course #: 05223200
Recommended Grade Placement: 10 1 Credit
Prerequisite: German I

This course continues the study of basic German concentrating on listening, speaking, reading and writing skills. In order for students to prepare for college level classes, a firm foundation of grammar is presented.

German II Pre-AP Course #: 05223250
Recommended Grade Placement: 10 1 Credit
Prerequisite: German I

This course is intended for the serious student who wishes to master the German language as a continuation in the study of the German language and culture. Expanded vocabulary and more complex grammatical structures are taught. Advanced concepts in reading and writing are applied. Oral communication skills are further stressed and strengthened. ***Pre-AP courses receive weighted GPA credit.***

German III Pre-AP Course #: 05223300
Recommended Grade Placement: 11 1 Credit
Prerequisite: German II

This course is a continuation of the development of reading, writing, listening, and speaking skills begun in German I and II. Functioning in everyday situations will be stressed. Students will begin to prepare for the Advanced Placement test. ***Pre-AP courses receive weighted GPA credit.***

German IV – Advanced Placement Course #: 05223400
Recommended Grade Placement: 12 1 Credit
Prerequisite: German III Pre-AP

The AP German program offers a course and examination in the German language. The course is intended to be roughly equivalent both in content and difficulty to a college German language course at the advanced level. This course continues development of reading, writing, listening and speaking skills begun in German I and Advance grammar and literature will be stressed. Students will be given the opportunity to take the AP German Language test. Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit. ***AP courses receive weighted GPA credit.***

Spanish I Course #: 05224100
Recommended Grade Placement: 9 1 Credit

The instruction in Spanish I initially has a strong emphasis on memorizing and using vocabulary for listening and speaking. However, reading and writing are quickly introduced. Upon completion of this course, students should be able to understand and carry on simple conversations based on greetings, introductions, family, home, school, daily routine, shopping, etc. They should know the basic elements of grammar.

Spanish I Pre-AP Course #: 05224150
Recommended Grade Placement: 9 1 Credit

The instruction in Spanish I initially has a strong emphasis on memorizing and using vocabulary for listening and speaking. However, reading and writing are quickly introduced. Upon completion of this course, students should be able to understand and carry on simple conversations based on greetings, introductions, family, home, school, daily routine, shopping, etc. They should know the basic elements of grammar. ***Pre-AP courses receive weighted GPA credit.***

Spanish II Course #: 05224200
Recommended Grade Placement: 9-10 1 Credit
Prerequisite: Spanish I

A special emphasis on listening and speaking is continued. In order for the students to be prepared for college level classes, a firm foundation in grammar is presented.

Spanish II Pre-AP Course #: 05224250
Recommended Grade Placement: 9-10 1 Credit
Prerequisite: Spanish I

Pre-AP II is a course designed for the student who has future plans to take Pre-AP III and eventually AP Spanish IV by enriching the course through depth and complexity. Emphasis in this class is on the spoken language. Listening, speaking, reading and writing skills are practiced. Emphasis is given to the acquisition of useful vocabulary and advanced grammar skills and concepts. Students read Spanish short stories and poems. ***Pre-AP courses receive weighted GPA credit.***

Spanish III Pre-AP Course #: 05224300
Recommended Grade Placement: 10-11 1 Credit
Prerequisite: Spanish II

The Pre-AP Spanish III course will help students prepare for Spanish IV AP by enriching the course through depth and complexity. Emphasis in this class is on the spoken language. Listening, speaking, reading and writing skills are practiced. Emphasis is given to the acquisition of useful vocabulary and advanced grammar skills and concepts. ***Pre-AP courses receive weighted GPA credit.***

Spanish IV – Spanish Language - Advanced Placement Course #: 05224400
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Spanish III Pre-AP

The AP Spanish program offers a course description and examination in the Spanish language. The course is intended to be roughly equivalent both in content and difficulty to a college Spanish language course at the advanced level. Upon completion of the course a student may take the advanced placement exam for college level. Advanced Placement is open enrollment. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted GPA credit.***

Spanish V – Spanish Literature - Advanced Placement Course #: 05224500
Recommended Grade Placement: 12 1 Credit
Prerequisite: Spanish IV

This course is comparable to a third year college course in advanced Spanish composition and conversation. It emphasizes the use of Spanish for active communication and encompasses aural/oral skills, reading, comprehension, grammar, composition, literature, and culture. Course content will cover a wide range of intellectual interests including the arts, history, current events, modern literature, sports, etc. Materials will include films, newspapers, magazines, short stories, and novels. The course will be conducted entirely in Spanish. Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit. ***AP courses receive weighted GPA credit.***

Spanish for Native Speakers
Recommended Grade Placement: 9
Prerequisite: Native Spanish Speaker

Course#: 05094100, 05094200
2 Credits

This course integrates communication, culture, connections, comparisons, and communities. It incorporates the study of Hispanic language and culture and assists students in understanding and appreciating this culture. The main object is to enrich the students' total language experience by building on the language proficiency already possessed. The focus is on increasing students' ability to use Spanish flexibly, both in formal and informal situations, and on developing their literacy skills. Students receive credit for both Spanish I and Spanish II.

Fine Arts

Art I Course #: 06221100
Recommended Grade Placement: 9-12 1 Credit

Art I is the introductory course offered for high school graduation credit. It is required of every student who plans to take other art courses. The course emphasizes the following disciplines:

1. An understanding of art principles and elements
2. Exploring various art techniques and media methods
3. Acquainting students with artists and periods of the past and present
4. Developing art appreciation skills

Experiences are provided in life drawing and still-life drawing, painting, color, design, sculpture, and printmaking. A willingness to draw on a daily basis is expected. Please see the district approved fee list for course fees.

Art II Course #: 06221200
Recommended Grade Placement: 10-12 1 Credit
Prerequisite: Art I

Art II is similar to Art I but on a more advanced level in each assignment with additions of silk screening and painting on canvas.

Ceramics I Course #: 06221210
Recommended Grade Placement: 10-12 1 Credit
Prerequisite: Art I

Ceramics II students make notes from the natural environment and record interesting visual relationships in mechanical structures as sources for their ceramic designs. Students search for parallels between visual structures in their natural and human-made environments and incorporate their findings in creative ceramic works. By maintaining a sketchbook or ceramics journal, students create a valuable repository for visual fragments, precise observations, characteristics of ceramic materials, and designs for ceramic pieces. This course introduces students to basic materials and processes in ceramic construction. Students will experience hand built techniques, thrown forms, surface decorations, firing process. Students will create functional and non-functional pieces while incorporating the elements and principles of design.

Art III Course #: 06221300
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Art II

The focus of the advanced level class is on depth of experience, honing of skills, and the preparation of a portfolio appropriate for students planning to continue their education in art at the college level. Students will spend an approximate 6-week block in the areas of drawing, painting, ceramics, printmaking, 3-dimensional design, and portfolio/concentration. As the emphasis is on a continuing art education, students should have an interest in art and perfecting their skills.

Art IV Course #: 06221400

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Art III

The focus of the advanced level class is on depth of experience, honing of skills, and the preparation of a portfolio appropriate for students planning to continue their education in art at the college level. Students will spend an approximate 6-week block in the areas of drawing, painting, ceramics, printmaking, 3-dimensional design, and portfolio/concentration. As the emphasis is on a continuing art education, students should have an interest in art and perfecting their skills. ***This course receives weighted credit for GPA calculation.***

Studio Art – Advanced Placement Course #: 06221500

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Art II

The focus of this advanced level class is for the student to present selected material from his or her personal work done during the AP course for evaluation at the end of the year by a group of artists and teachers. Students will work in the areas of drawing, painting, ceramics, printmaking, 3- dimensional design, and portfolio/concentration area. As the emphasis is on continuing art education, students should have an interest in art and perfecting their skills. Students may qualify for college credits based on their AP portfolio evaluation. **Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit.** ***AP courses receive weighted credit for GPA calculation.***

Band I Course #: 06222100; 06222105

Recommended Grade Placement: 9 1 Credit

Prerequisite: 8th grade band experience

Emphasis is mastery of the following disciplines: correct care and handling of the instrument, breath control, correct development of embouchure, tone articulation and fingering, marching fundamentals with physical coordination and precision, and performance. Students learn these disciplines along with music history, theory, sight-reading, and concert techniques through marching and drilling, discriminative listening, and performance. Students perform at all football games, pep rallies, etc. as well as competitions designed for high-level music programs. The first semester of the first two levels may be used as a substitution for PE credit.

Band II Course #: 06222200; 06222205

Recommended Grade Placement: 10 1 Credit

Prerequisite: Band I

Emphasis is mastery of the following disciplines: correct care and handling of the instrument, breath control, correct development of embouchure, tone articulation and fingering, marching fundamentals with physical coordination and precision, and performance. Students learn these disciplines along with music history, theory, sight-reading, and concert techniques through marching and drilling, discriminative listening, and performance. Students perform at all football games, pep rallies, etc. as well as competitions designed for high-level music programs. The first semester of the first two levels may be used as a substitution for PE credit.

Band III Course #: 06222300
Recommended Grade Placement: 11 1 Credit
Prerequisite: Band II

Emphasis is mastery of the following disciplines: correct care and handling of the instrument, breath control, correct development of embouchure, tone articulation and fingering, marching fundamentals with physical coordination and precision, and performance. Students learn these disciplines along with music history, theory, sight-reading, and concert techniques through marching and drilling, discriminative listening, and performance. Students perform at all football games, pep rallies, etc. as well as competitions designed for high-level music programs.

Band IV Course #: 06222400
Recommended Grade Placement: 12 1 Credit
Prerequisite: Band III

Emphasis is mastery of the following disciplines: correct care and handling of the instrument, breath control, correct development of embouchure, tone articulation and fingering, marching fundamentals with physical coordination and precision, and performance. Students learn these disciplines along with music history, theory, sight-reading, and concert techniques through marching and drilling, discriminative listening, and performance. Students perform at all football games, pep rallies, etc. as well as competitions designed for high-level music programs. ***This course receives weighted credit for GPA calculation.***

Jazz Studies I Course #: 06222150
Recommended Grade Placement: 9-12 1 Credit
Prerequisite: Class will be set by audition only

Jazz Studies is an introductory course to the style, history, and theory behind an original American genre of music. The course will include textbook study with musical instrument and vocal performance to achieve curricular goals and concert and community performances. Students will be provided with compositional and expressive experiences in the scope of the lessons. This is a year-long course.

Jazz Studies II Course #: 06222250
Recommended Grade Placement: 10-12 1 Credit
Prerequisite: Class will be set by audition only

Jazz Studies is an introductory course to the style, history, and theory behind an original American genre of music. The course will include textbook study with musical instrument and vocal performance to achieve curricular goals and concert and community performances. Students will be provided with compositional and expressive experiences in the scope of the lessons. This is a year-long course.

Jazz Studies III Course #: 06222350
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Class will be set by audition only

Jazz Studies is an introductory course to the style, history, and theory behind an original American genre of music. The course will include textbook study with musical instrument and vocal performance to achieve curricular goals and concert and community performances. Students will be provided with compositional and expressive experiences in the scope of the lessons. This is a year-long course.

Jazz Studies IV Course #: 06222450
Recommended Grade Placement: 12 1 Credit
Prerequisite: Class will be set by audition only

Jazz Studies is an introductory course to the style, history, and theory behind an original American genre of music. The course will include textbook study with musical instrument and vocal performance to achieve curricular goals and concert and community performances. Students will be provided with compositional and expressive experiences in the scope of the lessons. This is a year-long course.

Color Guard/Winter Guard I Course #: 06222500; 06222505
Recommended Grade Placement: 9-12 1 Credit
Prerequisite: Tryouts, physical and medical history on file

Color Guard is part of the Band program. The Color Guard is a competitive group who learns dance, movement, flag, and other equipment. This group performs with the band at all football games and is a part of the competitive marching season. During the spring semester the winter guard moves indoors to compete on the local, state, and national levels. There are required summer rehearsals for this group. The first semester of the first two levels may be used as a substitution for PE credit.

Color Guard/Winter Guard II Course #: 06222600; 06222605
Recommended Grade Placement: 10-12 1 Credit
Prerequisite: Tryouts, physical and medical history on file

Color Guard is part of the Band program. The Color Guard is a competitive group who learns dance, movement, flag, and other equipment. This group performs with the band at all football games and is a part of the competitive marching season. During the spring semester the winter guard moves indoors to compete on the local, state, and national levels. There are required summer rehearsals for this group. The first semester of the first two levels may be used as a substitution for PE credit.

Color Guard/Winter Guard III Course #: 06222700
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Tryouts, physical and medical history on file

Color Guard is part of the Band program. The Color Guard is a competitive group who learns dance, movement, flag, and other equipment. This group performs with the band at all football games and is a part of the competitive marching season. During the spring semester the winter guard moves indoors to compete on the local, state, and national levels. There are required summer rehearsals for this group.

Color Guard/Winter Guard IV Course #: 06222800
Recommended Grade Placement: 12 1 Credit
Prerequisite: Tryouts, physical and medical history on file

Color Guard is part of the Band program. The Color Guard is a competitive group who learns dance, movement, flag, and other equipment. This group performs with the band at all football games and is a part of the competitive marching season. During the spring semester the winter guard moves indoors to compete on the local, state, and national levels. There are required summer rehearsals for this group. ***This course receives weighted credit for GPA calculation.***

Choir I Course #: 06223100

Recommended Grade Placement: 9-12 1 Credit

This course is the study of vocal and choral techniques including a study of sight singing and theory. Students compete in various levels of UIL competition as well as perform at school and other extra-curricular functions throughout the year. The elective course selection sheet will include the various choirs available. The Director will use auditions to determine final placement of choir members.

Choir II Course #: 06223200

Recommended Grade Placement: 10-12 1 Credit

Prerequisite: Choir I

This course is the study of vocal and choral techniques including a study of sight singing and theory. Students compete in various levels of UIL competition as well as perform at school and other extra-curricular functions throughout the year. The elective course selection sheet will include the various choirs available. The Director will use auditions to determine final placement of choir members.

Choir III Course #: 06223300

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Choir II

This course is the study of vocal and choral techniques including a study of sight singing and theory. Students compete in various levels of UIL competition as well as perform at school and other extra-curricular functions throughout the year. The elective course selection sheet will include the various choirs available. The Director will use auditions to determine final placement of choir members.

Choir IV Course #: 06223400

Recommended Grade Placement: 12 1 Credit

Prerequisite: Choir III

This course is the study of vocal and choral techniques including a study of sight singing and theory. Students compete in various levels of UIL competition as well as perform at school and other extra-curricular functions throughout the year. The elective course selection sheet will include the various choirs available. The Director will use auditions to determine final placement of choir members. ***This course receives weighted credit for GPA calculation.***

Music Theory I Course #: 06222900

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: A minimum of two (2) years of school band or choir

This course is designed for students planning to enter the music field in college. Also to prepare them to take the Music Theory advanced placement exam for college credit. It will consist of the study of music notation, sight singing, ear training, musical terms, musical form, and analysis.

Music Theory - Advanced Placement Course #: 06222950

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: A minimum of two (2) years of school band or choir

This course is designed for students planning to enter the music field in college. Also to prepare them to take the Music Theory advanced placement exam for college credit. It will consist of the study of music notation, sight singing, ear training, musical terms, musical form, and analysis. Upon completion of Music Theory II, a student may take the advanced placement exam for college credit. Students enrolling in Advanced Placement courses will be required to take the Advanced Placement exam for each course in order to receive credit. ***AP courses receive weighted GPA credit.***

Dance I Course #: 0622410

Recommended Grade Placement: 9-12 1 Credit

Dance class fosters the exploration and appreciation of diverse dance traditions and history while developing skills of observation, analysis, expression, and reflection. The class will focus on various types of dance such as ballet, jazz, hip hop, clogging, and modern. The purpose is to increase and enhance agility, endurance, flexibility, coordination, and balance. Dance students will be encouraged to perform before an audience at the annual spring show at the end of the year. This class may serve as a preparatory class for drill/dance team tryouts. Classes must be taken in order beginning with Dance I. Prior dance experience is not required. Students are required to purchase all black dance attire for class.

Dance II Course #: 06224200

Recommended Grade Placement: 9-12 (9th with instructor approval) 1 Credit

Dance class fosters the exploration and appreciation of diverse dance traditions and history while developing skills of observation, analysis, expression, and reflection. The class will focus on various types of dance such as ballet, jazz, hip hop, clogging, and modern. The purpose is to increase and enhance agility, endurance, flexibility, coordination, and balance. Dance students will be encouraged to perform before an audience at the annual spring show at the end of the year. This class may serve as a preparatory class for drill/dance team tryouts. Classes must be taken in order beginning with Dance I. Students are required to purchase all black dance attire for class.

Dance III Course #: 06224300

Recommended Grade Placement: 10-12 (10th with instructor approval) 1 Credit

Dance class fosters the exploration and appreciation of diverse dance traditions and history while developing skills of observation, analysis, expression, and reflection. The class will focus on various types of dance such as ballet, jazz, hip hop, clogging, and modern. The purpose is to increase and enhance agility, endurance, flexibility, coordination, and balance. Dance students will be encouraged to perform before an audience at the annual spring show at the end of the year. This class may serve as a preparatory class for drill/dance team tryouts. Classes must be taken in order beginning with Dance I. Students are required to purchase all black dance attire for class.

Dance IV Course #: 06224400

Recommended Grade Placement: 11-12 (11th with instructor approval) 1 Credit

Dance class fosters the exploration and appreciation of diverse dance traditions and history while developing skills of observation, analysis, expression, and reflection. The class will focus on various types of dance such as ballet, jazz, hip hop, clogging, and modern. The purpose is to increase and enhance agility, endurance, flexibility, coordination, and balance. Dance students will be encouraged to perform before an audience at the annual spring show at the end of the year. This class may serve as a preparatory class for drill/dance team tryouts. Classes must be taken in order beginning with Dance I. Students are required to purchase all black dance attire for class. ***This course receives weighted GPA credit.***

Drill Team I Course #: 06226100; 226105

Recommended Grade Placement: 9-12 1 Credit

Prerequisite: Tryout and selection process, physical and medical history on file

This course is designed for members of the high school's drill team after successful completion of the audition process held during the previous spring. Emphasis is placed on teamwork and dancing throughout the year in performances at football halftimes, basketball halftimes, pep rallies, and other community functions. Students will learn many different styles of dance including modern, ballet, tap, jazz, novelty, kick, hip-hop, funk, and dances using various props. In the spring, drill team members will compete with other schools in dance and drill team contests, then produce and perform in a spring show and continue dancing techniques in class. Students are required to purchase items after tryouts for team use starting at the line camp. Members will be provided an order form. Students enrolled in the drill team class will receive a PE substitution credit for the fall semester of the first two years enrolled and a fine arts credit each semester/year thereafter.

Drill Team II Course #: 06226200; 06226205

Recommended Grade Placement: 10-12 1 Credit

Prerequisite: Tryout and selection process, physical and medical history on file

This course is designed for members of the high school's drill team after successful completion of the audition process held during the previous spring. Students will learn many different styles of dance In the spring, drill team members will compete with other schools in dance and drill team contests, then produce and perform in a spring show and continue dancing techniques in class. Students are required to purchase items after tryouts for team use starting at the line camp. Members will be provided an order form. Students enrolled in the drill team class will receive a PE substitution credit for the fall semester of the first two years enrolled and a fine arts credit each semester/year thereafter.

Drill Team III Course #: 06226300

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Tryout and selection process, physical and medical history on file

This course is designed for members of the high school's drill team after successful completion of the audition process held during the previous spring. Emphasis is placed on teamwork and dancing throughout the year in performances at football halftimes, basketball halftimes, pep rallies, and other community functions. Students will learn many different styles of dance including modern, ballet, tap, jazz, novelty, kick, hip-hop, funk, and dances using various props. In the spring, drill team members will compete with other schools in dance and drill team contests, then produce and perform in a spring show and continue dancing techniques in class. Students are required to purchase items after tryouts for team use starting at the line camp. Members will be provided an order form.

Drill Team IV Course #: 06226400

Recommended Grade Placement: 12 1 Credit

Prerequisite: Tryout and selection process, physical and medical history on file

This course is designed for members of the high school's drill team after successful completion of the audition process held during the previous spring. Emphasis is placed on teamwork and dancing throughout the year in performances at football halftimes, basketball halftimes, pep rallies, and other community functions. Students will learn many different styles of dance including modern, ballet, tap, jazz, novelty, kick, hip-hop, funk, and dances using various props. In the spring, drill team members will compete with other schools in dance and drill team contests, then produce and perform in a spring show and continue dancing techniques in class. Students are required to purchase items after tryouts for team use starting at the line camp. Members will be provided an order form.

Theatre Arts I Course #: 06225100

Recommended Grade Placement: 9-12 1 Credit

Theatre Arts focuses on the individualized study of acting through performance of scene work and improvisation. Students will study theatre history, literature, performance, and period styles. Advanced classes will include a study of oral interpretation of literature and classical literature from various genres.

Theatre Arts II Course #: 06225200

Recommended Grade Placement: 9-12 (9th with instructor approval) 1 Credit

Theatre Arts focuses on the individualized study of acting through performance of scene work and improvisation. Students will study theatre history, literature, performance, and period styles. Advanced classes will include a study of oral interpretation of literature and classical literature from various genres.

Theatre Arts III Course #: 06225300

Recommended Grade Placement: 10-12 (10th with instructor approval) 1 Credit

Theatre Arts focuses on the individualized study of acting through performance of scene work and improvisation. Students will study theatre history, literature, performance, and period styles. Advanced classes will include a study of oral interpretation of literature and classical literature from various genres.

Theatre Arts IV Course #: 06225400
Recommended Grade Placement: 11-12 (11th with instructor approval) 1 Credit

Theatre Arts focuses on the individualized study of acting through performance of scene work and improvisation. Students will study theatre history, literature, performance, and period styles. Advanced classes will include a study of oral interpretation of literature and classical literature from various genres. ***This course receives weighted credit for GPA calculation.***

Technical Theatre I Course #: 06225510
Recommended Grade Placement: 9-12 (9th with instructor approval) 1 Credit

Students explore all areas of technical theatre, i.e. the areas of construction of set, props, costumes, and production of sound and lighting. Students will learn stage and shop safety along with tool usage by practical application through the construction and running of school productions.

Technical Theatre II Course #: 06225520
Recommended Grade Placement: 10-12 (10th with instructor approval) 1 Credit

Students explore all areas of technical theatre, i.e. the areas of construction of set, props, costumes, and production of sound and lighting. Students will learn stage and shop safety along with tool usage by practical application through the construction and running of school productions.

Technical Theatre III Course #: 06225530
Recommended Grade Placement: 11-12 (11th with instructor approval) 1 Credit

Students explore all areas of technical theatre, i.e. the areas of construction of set, props, costumes, and production of sound and lighting. Students will learn stage and shop safety along with tool usage by practical application through the construction and running of school productions.

Technical Theatre IV Course #: 06225540
Recommended Grade Placement: 12 1 Credit

Students explore all areas of technical theatre, i.e. the areas of construction of set, props, costumes, and production of sound and lighting. Students will learn stage and shop safety along with tool usage by practical application through the construction and running of school productions.

Theatre Production I Course #: 06225610
Recommended Grade Placement: 9-12 1 Credit
Prerequisite: By audition by the director only

Theatre Production focuses on the study of acting through the performance of plays for the public. Students will produce plays for the public. Students will produce plays for performance during and after school. The Advanced Theater Production class requires rehearsals after school. Student enrollment is by audition only.

Theatre Production II Course #: 06225620
Recommended Grade Placement: 10-12 1 Credit
Prerequisite: By audition by the director only

Theatre Production focuses on the study of acting through the performance of plays for the public. Students will produce plays for the public. Students will produce plays for performance during and after school. The Advanced Theater Production class requires rehearsals after school. Student enrollment is by audition only.

Theatre Production III Course #: 06225630
Recommended Grade Placement: 9-12 1 Credit
Prerequisite: By audition by the director only

Theatre Production focuses on the study of acting through the performance of plays for the public. Students will produce plays for the public. Students will produce plays for performance during and after school. The Advanced Theater Production class requires rehearsals after school. Student enrollment is by audition only.

Theatre Production IV Course #: 06225640
Recommended Grade Placement: 12 1 Credit
Prerequisite: By audition by the director only

Theatre Production focuses on the study of acting through the performance of plays for the public. Students will produce plays for the public. Students will produce plays for performance during and after school. The Advanced Theater Production class requires rehearsals after school. Student enrollment is by audition only.
This course receives weighted credit for GPA calculation.

Cheerleading I Course #: 08224110;
Recommended Grade Placement: 10 08224115
Prerequisite: Tryout and selection process, physical and medical history on file ½ PE & ½ Local Credit

All varsity and junior varsity cheerleaders and the mascot shall register for a cheerleading class. The class will be designed to meet the needs of the squad to handle the duties of the squad for the entire school year. Some practices will require before and/or after school hours. Practice time, pep rally planning, conditioning, aerobic training, team building, and leadership training are the basic skills that will be taught. Students enrolled in the cheerleading class will receive a PE substitution credit for the fall semester and a local credit for the spring semester the first two years enrolled and local credit each year thereafter.

Cheerleading II Course #: 08224120;
Recommended Grade Placement: 10 08224125
Prerequisite: Tryout and selection process, physical and medical history on file ½ PE & ½ Local Credit

All varsity and junior varsity cheerleaders and the mascot shall register for a cheerleading class. The class will be designed to meet the needs of the squad to handle the duties of the squad for the entire school year. Some practices will require before and/or after school hours. Practice time, pep rally planning, conditioning, aerobic training, team building, and leadership training are the basic skills that will be taught. Students enrolled in the cheerleading class will receive a PE substitution credit for the fall semester and a local credit for the spring semester the first two years enrolled and local credit each year thereafter.

Cheerleading III Course #: 08224130; 08224135

Recommended Grade Placement: 11 1 Local Credit

Prerequisite: Tryout and selection process, physical and medical history on file

All varsity and junior varsity cheerleaders and the mascot shall register for a cheerleading class. The class will be designed to meet the needs of the squad to handle the duties of the squad for the entire school year. Some practices will require before and/or after school hours. Practice time, pep rally planning, conditioning, aerobic training, team building, and leadership training are the basic skills that will be taught. Students enrolled in the cheerleading class will receive a PE substitution credit for the fall semester and a local credit for the spring semester the first two years enrolled and local credit each year thereafter.

Cheerleading IV Course #: 08224140

Recommended Grade Placement: 12 1 Local Credit

Prerequisite: Tryout and selection process, physical and medical history on file

All varsity and junior varsity cheerleaders and the mascot shall register for a cheerleading class. The class will be designed to meet the needs of the squad to handle the duties of the squad for the entire school year. Some practices will require before and/or after school hours. Practice time, pep rally planning, conditioning, aerobic training, team building, and leadership training are the basic skills that will be taught. Students enrolled in the cheerleading class will receive a PE substitution credit for the fall semester and a local credit for the spring semester the first two years enrolled and local credit each year thereafter.

Athletics / Physical Education

Athletics I-IV
Recommended Grade Placement: 9-12
Prerequisite: Tryout and selection process, physical and medical history on file

Course #: see table below
1 Credit

Competitive athletic programs are available for boys and girls throughout the school year. As a rule, students who are in athletics are required to remain in some phase of the program throughout the year. Maximum state credits that may be earned is four. For supply fees, see district-approved fee list.

Boys Athletics				
	Year 1	**Year 2**	**Year 3**	**Year 4**
	Course #			
Baseball **I, II, III, IV**	08223110 08223115	08223120 08223125	08223130	08223140
Basketball **I, II, III, IV**	08223210 08223215	08223220 08223225	08223230	08223240
Football **I, II, III, IV**	08223310 08223315	08223320 08223325	08223330	08223340
Golf **I, II, III, IV**	08223410 08223415	08223420 08223425	08223430	08223440
Soccer **I, II, III, IV**	08223510 08223515	08223520 08223525	08223530	08223540
Swim **I, II, III, IV**	08223610 08223615	08223620 08223625	08223630	08223640
Tennis **I, II, III, IV**	08223710 08223715	08223720 08223725	08223730	08223740
Track/Cross Country **I, II, III, IV**	08223810 08223815	08223820 08223825	08223830	08223840

Girls Athletics				
	Year 1	**Year 2**	**Year 3**	**Year 4**
	Course #			
Basketball **I, II, III, IV**	08224010 08224015	08224020 08224025	08224030	08224040
Fastpitch Softball **I, II, III, IV**	08224410 08224415	08224420 08224425	08224430	08224440
Golf **I, II, III, IV**	08224210 08224215	08224220 08224225	08224230	08224240
Soccer **I, II, III, IV**	08224310 08224315	08224320 08224325	08224330	08224340
Swim **I, II, III, IV**	08224510 08224515	08224520 08224525	08224530	08224540
Tennis **I, II, III, IV**	08224610 08224615	08224620 08224625	08224630	08224640
Track/Cross Country **I, II, III, IV**	08224710 08224715	08224720 08224725	08224730	08224740
Volleyball **I, II, III, IV**	08224910 08224915	08224920 08224925	08224930	08224940

Basic Athletic Training I Course #: 08223901

Recommended Grade Placement: 9-12 1 Credit

Prerequisite: Application and selection process

This is a hands-on course that will cover current practice theories, and techniques in the care and prevention of injuries, and medical problems related to athletics. Topics include recognition of injuries, conditioning, nutrition, health and wellness, rehabilitation, first aid and CPR. Must be willing to work long hours after school and on some weekends; must be in good physical condition; must complete the application. Each student will enroll in the class and be selected as a student athletic trainer based on their performance and behavior.

Basic Athletic Training II Course #: 08223902
Recommended Grade Placement: 10-12 1 Credit
Prerequisite: Application and selection process

This is a hands-on course that will cover current practice theories, and techniques in the care and prevention of injuries, and medical problems related to athletics. Topics include recognition of injuries, conditioning, nutrition, health and wellness, rehabilitation, first aid and CPR. Must be willing to work long hours after school and on some weekends; must be in good physical condition; must complete the application. Each student will enroll in the class and be selected as a student athletic trainer based on their performance and behavior.

Basic Athletic Training III Course #: 08223903
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Application and selection process

This is a hands-on course that will cover current practice theories, and techniques in the care and prevention of injuries, and medical problems related to athletics. Topics include recognition of injuries, conditioning, nutrition, health and wellness, rehabilitation, first aid and CPR. Must be willing to work long hours after school and on some weekends; must be in good physical condition; must complete the application. Each student will enroll in the class and be selected as a student athletic trainer based on their performance and behavior.

Basic Athletic Training IV Course #: 08223904
Recommended Grade Placement: 12 1 Credit
Prerequisite: Application and selection process

This is a hands-on course that will cover current practice theories, and techniques in the care and prevention of injuries, and medical problems related to athletics. Topics include recognition of injuries, conditioning, nutrition, health and wellness, rehabilitation, first aid and CPR. Must be willing to work long hours after school and on some weekends; must be in good physical condition; must complete the application. Each student will enroll in the class and be selected as a student athletic trainer based on their performance and behavior.

PE Foundations Of Personal Fitness – Girls and Boys Physical Education Course #: 08090110
Recommended Grade Placement: 9 1 Credit

This course focuses on the teaching of skills, the acquisition of knowledge, and the development of attitudes through movement. The class will include a variety of recreational activities, fitness, lifetime sports, team sports, and weight training and conditioning.

PE Outdoor Adventures Course #: 08220350
Recommended Grade Placement: 10-12 1 Credit

Outdoor Adventures is a fun and exciting co-ed physical education course. Students are taught life-long skills by using an integrated curriculum of science, math, writing, critical thinking skills, and computer technology. The focus is on outdoor activities such as: archery, orienteering, survival skills, first aid/CPR, trip planning, angling, tackle crafts, hiking, backpacking, camping, outdoor cooking, conservation/environmental issues and certifications through the Texas Parks & Wildlife Department (TPWD) and the American Heart Association. On campus activities include: archery, angling, CPR/first aid, survival skills, trip planning, tackle crafts, and orienteering.

PE Aerobic Activities Course #: 08220115
Recommended Grade Placement: 10-12 1 Credit

This course focuses on the teaching of skills, the acquisition of knowledge, and the development of attitudes through movement to develop a physically-active lifestyle that improves health and enjoyment. The class will involve a variety of recreational activities that may include aerobic dance, jogging, power walking, recreational dance, and step aerobics and promote cardiovascular endurance, muscular strength and endurance, flexibility, and healthy body composition.

PE Individual and Team Sports Course #: 08220220
Recommended Grade Placement: 10-12 1 Credit

This class would consist of activities that challenge the student to promote body awareness through conditioning exercises, weight training, and cardiovascular activity. Sports would include badminton, bowling, golf, gymnastics, horseshoes, table tennis, tennis, walking, and weights, and team oriented sports and activities such as basketball, flag football, floor hockey, kickball, soccer, softball, ultimate Frisbee, volleyball, and wiffleball.

PE Weight Training and Conditioning Course #: 08220120
Recommended Grade Placement: 10-12 1 Credit

Proper lifting procedures, elementary anatomy and physiology, related to lifting, various types of lifting programs, and several cardiovascular conditioning programs are implemented in this course. This course satisfies the knowledge and skills for Aerobic Activities PE credit.

Team Sports Officiating Course #: 08223900
Recommended Grade Placement: 10-12 1 Credit

Students enrolled in the Team Sport Officiating course will learn rules and regulations of selected team sports, developing skills in the area of communication, decision-making, and conflict management, which are needed to officiate team sport competitions. They will work with coaches, players, other officials, and parents. The expectation is that students will have the ability to officiate at various levels and manage responsibilities that come with the role. Students will develop a personal fitness and injury prevention plan that directly relates to the needs of an official. Students will understand and apply time management skills required and recognize legal rights and responsibilities of an official involved with youth sports in the 21st century. Cardiopulmonary resuscitation (CPR), use of an automated external defibrillator (AED), and basic first aid skills will be taught in class. *Students will be certified in CPR/AED first aid and receive an officiating certificate upon successful completion of course.*

Other Electives

AVID I Course #: 10099100
Recommended Grade Placement: 9 1 Credit
Prerequisite: Application and selection process

AVID stands for Advancement via Individual Determination: AVID is a ninth- through twelfth-grade system to prepare students in the academic middle — B, C, and even D students — who have the desire to go to college and the willingness to work hard. These are students who are capable of completing rigorous curriculum but are falling short of their potential. Typically, they will be the first in their families to attend college. AVID pulls these students out of unchallenging courses and puts them on the college track: acceleration instead of remediation.

AVID II Course #: 10109110
Recommended Grade Placement: 10 1 Credit
Prerequisite: Application and selection process

AVID stands for Advancement via Individual Determination: AVID is a ninth- through twelfth-grade system to prepare students in the academic middle — B, C, and even D students — who have the desire to go to college and the willingness to work hard. These are students who are capable of completing rigorous curriculum but are falling short of their potential. Typically, they will be the first in their families to attend college. AVID pulls these students out of unchallenging courses and puts them on the college track: acceleration instead of remediation.

AVID III Course #: 10119111
Recommended Grade Placement: 11 1 Credit
Prerequisite: Application and selection process

AVID stands for Advancement via Individual Determination: AVID is a ninth- through twelfth-grade system to prepare students in the academic middle — B, C, and even D students — who have the desire to go to college and the willingness to work hard. These are students who are capable of completing rigorous curriculum but are falling short of their potential. Typically, they will be the first in their families to attend college. AVID pulls these students out of unchallenging courses and puts them on the college track: acceleration instead of remediation.

AVID IV Course #: 10129112
Recommended Grade Placement: 12 1 Credit
Prerequisite: Application and selection process

AVID stands for Advancement via Individual Determination: AVID is a ninth- through twelfth-grade system to prepare students in the academic middle — B, C, and even D students — who have the desire to go to college and the willingness to work hard. These are students who are capable of completing rigorous curriculum but are falling short of their potential. Typically, they will be the first in their families to attend college. AVID pulls these students out of unchallenging courses and puts them on the college track: acceleration instead of remediation.

Junior Reserve Officers' Training Corps I (JROTC) Course #: 10220810
Recommended Grade Placement: 9-12 1 Credit
Prerequisite: Application

JROTC programs were designed to augment the service academies in producing leaders and managers for the armed forces. Each branch of the service has a specific set of courses and training which officers must complete prior to joining. This program is a stimulus for promoting graduation from high school, and it provides instruction and rewarding opportunities that will benefit the student, community, and nation. The JROTC program intends to teach cadets to appreciate the ethical values and principles that underlie good citizenship, to develop leadership potential while living and working cooperatively with others, to be able to think logically and to communicate effectively with others, both orally and in writing, to appreciate the importance of physical fitness in maintaining good health, to understand the importance of high school graduation for a successful future and learn about college and other advanced educations and employment opportunities, to develop mental management abilities, to become familiar with military history as it relates to America's culture, and understand the history, purpose, and structure of the military services, and to develop the skills necessary to work effectively as a member of a team. **1 PE Sub credit.**

Junior Reserve Officers' Training Corps II (JROTC) Course #: 10220820
Recommended Grade Placement: 10-12 1 Credit
Prerequisite: Application

See course description for JROTC I. PE sub credit for year I only.

Junior Reserve Officers' Training Corps III (JROTC) Course #: 10220830
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Application

See course description for JROTC I. PE sub credit for year I only.

Junior Reserve Officers' Training Corps IV (JROTC) Course #: 10220840
Recommended Grade Placement: 12 1 Credit
Prerequisite: Application

See course description for JROTC I. PE sub credit for year I only.

Path To College & Career II Course #: 10229110
Recommended Grade Placement: 10 1 Credit

The Path to College & Career Prep courses helps advance intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. The course will focus on developing the habits and skills that are expected in college study and the workforce. Students will be expected to meet the rigor of the Recommended High School Plan (RHSP).

Path To College & Career III Course #: 10229120
Recommended Grade Placement: 11 1 Credit

The Path to College & Career Prep courses helps advance intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. The course will focus on developing the habits and skills that are expected in college study and the workforce. Students will be expected to meet the rigor of the Recommended High School Plan (RHSP).

Path To College & Career IV Course #: 10229130
Recommended Grade Placement: 12 1 Credit

The Path to College & Career Prep courses help advance intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. The course will focus on developing the habits and skills that are expected in college study and the workforce. Students will be expected to meet the rigor of the Recommended High School Plan (RHSP).

Student Leadership Course #: 10229400
Recommended Grade Placement 11 - 12 1 Credit
Prerequisite: Application and selection process

This class is open to junior and senior students who want to have a positive impact on their high school. It is preferable that students be involved in Student Council or have other school leadership positions. This is a hands-on, lab-oriented class with an emphasis on group and individual projects. Leadership skills will be explored, discussed, and utilized. Among these skills will be parliamentary procedure, group dynamics, team building, goal setting, and communication. (State credit for one year only)

Teen Leadership I Course #: 10229600
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Application and selection process

Students in the Teen Leadership program will learn how to feel confident about their lives, plan time wisely, build and sustain healthy relationships, effectively speak in front of a group, use their money carefully and efficiently, take responsibility for their own actions and attitudes, and develop professional leadership skills. Students who have taken Teen Leadership discovered a real bond with their classmates from all age groups and cultures. They felt prepared for future leadership roles as examples for peers and teammates able to stand out from the crowd and ready to lead the way. The program is a highly interactive experience where students have the opportunity to present speeches, participate in group discussions and activities, write journals, work on team building and self-esteem.

Teen Leadership II Course #: 10229650

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Application and selection process

Teen Leadership II is a program offered to upper level students who have completed and passed Teen Leadership I class requirements. This class involves the application of the lessons learned in Teen Leadership I while mentoring elementary students and participating in school and community service. Teen Leadership students are responsible for their own transportation to and from their assigned school. Students will have the opportunity to further develop their own leadership skills as well as meet and discuss with civic and community leaders about future prospects for leadership. Students must complete and return an application by the due date and have good attendance and positive teacher evaluations to be considered for this course.

Career and Technical Education

Career and Technical Education provides the opportunities for students to take a sequence of courses in high school that prepare them for entry-level work in a career path. All CTE Programs of Study lead to either an industry certification in that area or college credit.

CTE Pathways are shown below. For detailed information on the Programs of Study available in each Pathway, along with career options and course descriptions, please see the table of contents on the next page.

CTE Table of Contents

Click any item in the table contents to navigate to that section.

Programs of Study in the AGRICULTURE, FOOD, AND NATURAL RESOURCES Pathway

Animal Science

Applied Agricultural Engineering

Plant Science

Animal Science Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **ANIMAL SCIENCE** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Agriculture, Food, and Natural Resources	❑ Livestock Production
❑ Small Animal Management	❑ Advanced Animal Science
❑ Equine Science	❑ Veterinary Medical Applications
	❑ Practicum of Agriculture, Food and Natural Resources

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

- Animal Sciences
- Agriculture
- Biology
- Zoology/ Animal Biology

Master's, Doctoral, and Professional Degrees

- Genetics
- Veterinary Medicine
- Biological and Physical Sciences
- Biological and Biomedical Sciences

Industry-Based Certifications

- Agricultural Biotechnology
- Certified Veterinary Assistant, Level 1
- Elanco Fundamentals of Animal Science Certification
- Elanco Veterinary Medical Applications Certification
- Equine Management & Evaluation Certification
- Feedyard Technician in Cattle Care and Handling
- Licensed Veterinary Technician
- Production Agriculture - Job Ready
- Small Animal Science and Technology

Work-Based Learning and Expanded Learning Opportunities

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

Aligned Occupations

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

Principles of Agriculture, Food and Natural Resources Course #: 07081000

Recommended Grade Placement: 9 1 Credit

This course helps students prepare for careers in agriculture, food and natural resources, students must develop academic skills and knowledge in agriculture. This course covers career opportunities, leadership, communications, and the FFA. Technical agricultural topics covered will include: soils, plants, animals, agricultural construction, food science, and welding.

Small Animal Management Course #: 07221520

Recommended Grade Placement: 9-11 ½ Credit

In this course, students acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. Suggested small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats.

Equine Science Course #: 07221500

Recommended Grade Placement: 9-11 ½ Credit

A course designed to develop knowledge and skills pertaining to the selection, nutrition, reproduction, health, and management of horses.

Livestock Production Course #: 07221530

Recommended Grade Placement: 10-11 1 Credit

In this course, students will examine animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. Animal species to be addressed in this course may include, but are not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry.

Advanced Animal Science Course #: 07221225

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board for Education for 4th Science Credit | Prerequisites: Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production. Recommended prerequisite: Veterinary Medical Applications.

This course is designed to examine the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to expand one's knowledge of the scientific and technological dimensions of resources necessary for animal production.

Veterinary Medical Applications Course #: 07221540

Recommended Grade Placement: 11-12 1 Credit

Prerequisites: Small Animal Management and Equine Science or Livestock Production

A course designed to review veterinary practices as they relate to both large and small animal species. Students will have the opportunity to take the Texas Veterinary Medical Association, Certified Veterinary Assistant Level I Exam.

Practicum in Agriculture, Food and Natural Resources Course #: 07221950

Recommended Grade Placement: 12 2 Credits

Prerequisite: At least one prior Agriculture, Food, and Natural Resources credit

The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. Students are required to serve in paid or unpaid internship opportunities. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Applied Agricultural Engineering
Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **APPLIED AGRICULTURAL ENGINEERING** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Agriculture, Food, and Natural Resources	❑ Agricultural Structure Design & Fabrication Lab (preferred course)
❑ Agricultural Mechanics & Metal Technologies	❑ Agricultural Equipment Design & Fabrication (preferred course)
	❑ Practicum in Agriculture, Food & Natural Resources

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

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

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

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

Industry-Based Certifications

- Agriculture Mechanics
- API 1104 Welding Pipelines and Related Facilities AWS Certified Welder
- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding
- AWS SENSE Level 1: Entry Welder
- Feedyard Technician in Machinery Operation, Repair and Maintenance
- Industrial Technology Maintenance (ITM) - Maintenance Welding
- Machining Measurement, Material, and Safety Level I
- NCCER Welding Level I
- NCCER Core
- General Welding - Job Ready

Work-Based Learning and Expanded Learning Opportunities

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

Aligned Occupations

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

Principles of Agricultural, Food & Natural Resources Course #: 07081000

Recommended Grade Placement 9 1 Credit

This course helps students prepare for careers in agriculture, food and natural resources, students must develop academic skills and knowledge in agriculture. This course covers career opportunities, leadership, communications, and the FFA. Technical agricultural topics covered will include: soils, plants, animals, agricultural construction, food science, and welding.

Agricultural Mechanics & Metal Technologies Course #: 722170

Recommended Grade Placement: 10-11 1 Credit

A course designed to introduce basic theory and specialized skills in agricultural mechanics. Skills to be developed include tool identification and safe use, painting, metal working, and welding processes.

Agricultural Structures Design & Fabrication Course #: 07221772

Recommended Grade Placement: 11-12 2 Credit

Recommended Prerequisite: Agricultural Mechanics & Metal Technologies

In Agricultural Structures Design & Fabrication, students will explore career opportunities, entry requirements, and industry expectations. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural structures design and fabrication. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

Agricultural Equipment Design & Fabrication Course #: 07221742

Recommended Grade Placement: 11 2 Credits

Prerequisite: Agriculture Mechanics & Metal Technologies

In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural equipment design and fabrication.

Practicum in Agriculture, Food & Natural Resources Course #: 07221950

Recommended Grade Placement: 12 2 Credits

Prerequisite: At least one prior Agricultural, Food & Natural Resources credit

The practicum or Coop course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. Students are required to serve in paid or unpaid internship opportunities. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Plant Science Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **PLANT SCIENCE** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Agriculture, Food & Natural Resources	❑ Floral Design
❑ Landscape Design & Management	❑ Horticulture Science
❑ Turf Grass Management	❑ Advanced Floral Design
	❑ Practicum in Agriculture, Food & Natural Resources

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

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

Aligned Occupations

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

Principles of Agriculture, Food & Natural Resources Course #: 07081000
Recommended Grade Placement: 9 1 Credit

This course helps students prepare for careers in agriculture, food and natural resources, students must develop academic skills and knowledge in agriculture. This course covers career opportunities, leadership, communications, and the FFA. Technical agricultural topic covered will include: soils, plants, animals, agricultural construction, food science, and welding.

Landscape Design & Management Course #: 07220620
Recommended Grade Placement: 10-11 ½ Credit

Landscape Design and Management is designed to develop an understanding of landscape design and management techniques and practices. Students will develop skills related to horticultural systems and workplace knowledge.

Turf Grass Management Course #: 07220625
Recommended Grade Placement: 10-11 ½ Credit

Turf Grass Management is designed to develop an understanding of turf grass management techniques and practices. Students will develop skills related to horticultural systems and workplace knowledge.

Floral Design Course #: 07091610
Recommended Grade Placement: 9-12 1 Credit
Approved by State Board of Education for Fine Arts credit

A course designed to develop skills in the design and arrangement of flowers, foliage, and related plant materials for interior locations. Students will make a variety of floral designs as well as plan a wedding, and learn the basics of running a florist. Students will have the opportunity to take a certification exam through the Texas State Florist Association.

Horticulture Science Course #: 07221620
Recommended Grade Placement: 10-11 1 Credit

Horticultural Science is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Advanced Floral Design Course #: 07091620

Recommended Grade Placement: 11-12 1 Credit

In this course, students build on the knowledge from the Floral Design course and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced floral design and providing students with a thorough understanding of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of a specific occasion or event. Through the analysis and evaluation of various occasion and event types, students explore the design needs and expectations of clients and propose and evaluate appropriate creations. From conception to evaluation, students are challenged to create and design appropriate specialty floral designs that meet the needs of the client. Furthermore, an emphasis on budgetary adherence and entrepreneurship equips students with many of the necessary skills needed for success in floral enterprises.

Practicum in Agriculture, Food & Natural Resources Course #: 07221950

Recommended Grade Placement: 12 2 Credits

Prerequisite: At least one prior Agriculture, Food & Natural Resources credit

The practicum or Coop course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. Students are required to serve in paid or unpaid internship opportunities. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Programs of Study in the ARCHITECTURE AND CONSTRUCTION Pathway

Architectural Design

Construction Technology (Carpentry)

Architectural Design
Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **ARCHITECTURAL DESIGN** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Architectural Design I	❑ Architectural Design II ❑ Civil Engineering & Architecture ❑ Practicum in Architectural Design

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Autodesk Associate (Certified User) 3ds MAX
- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Fusion 360
- Autodesk Associate (Certified User) Revit Architecture
- Autodesk Associate (Certified User) Revit for Electrical
- Autodesk Associate (Certified User) Revit for Structural Design Autodesk Certified Professional Fusion 360
- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional in Civil 3D for Infrastructure Design
- Autodesk Certified Professional in Revit for Architectural Design
- Autodesk Certified Professional in Revit for Electrical Design
- Autodesk Certified Professional in Revit for Structural Design
- LEED Green Associate

- Certified SOLIDWORKS Associate*
- Mastercam Associate Certification*

Aligned Occupations

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

Architectural Design I Course #: 07224310

Recommended Grade Placement: 9-10 1 Credit

Recommended Prerequisite: Geometry

In Architectural Design, students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Architectural design includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

Architectural Design II Course #: 07224410

Recommended Grade Placement: 10-11 2 Credits

Prerequisite: Architectural Design I and Geometry

In Architectural Design II, students gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Architectural Design II includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

Civil Engineering & Architecture Course #: 07228240

Recommended Grade Placement: 10-11 1 Credit

Through both individual and collaborative team activities, projects, and problems, students problem solve as they practice common design and development protocols such as project management and peer review. Students develop skill in engineering calculations, technical representation, documentation of design solutions according to accepted technical standards, and use of current 3D architectural design and modeling software to represent and communicate solutions.

Practicum in Architectural Design Course #: 07225810

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Architectural Design II

This course is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency and additional and more advanced knowledge and skills.

Construction Technology (Carpentry)
Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **CONSTRUCTION TECHNOLOGY (CARPENTRY)** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Construction	❑ Construction Technology II
❑ Construction Technology I	❑ Practicum in Construction Technology

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

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

Bachelor's Degrees
- Construction Science

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- HBI Pre-Apprenticeship Certificate Training (PACT), Basic Carpentry
- HBI Pre-Apprenticeship Certificate Training (PACT), Core
- HBI Pre-Apprenticeship Certificate Training (PACT), Green Core
- NCCER Carpentry Level I
- NCCER Carpentry Level II
- NCCER Commercial Carpenter
- NCCER Construction Technology Certification Level I
- NCCER Core
- NCCER Painting: Commercial and Residential Level I

- OSHA 30 Hour Construction*
- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Aligned Occupations

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

Principles of Construction Course #: 07090800

Recommended Grade Placement: 9 1 Credit

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. For safety and liability considerations, limiting course enrollment to 15 students is recommended. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment**.**

Construction Technology I Course #: 07228620

Recommended Grade Placement: 10-11 2 Credits

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

Construction Technology II Course #: 07228630

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Construction Technology I

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

Practicum in Construction Technology Course #: 07225820

Recommended Grade Placement: 12 2 Credits

Prerequisite: Construction Technology II

Practicum in Construction Management is an occupationally specific course designed to provide classroom technical instruction or on-the-job training experiences. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Programs of Study in the ARTS, AUDIO VIDEO TECHNOLOGY, AND COMMUNICATIONS Pathway

Graphic Design & Multimedia Arts

Digital Communications

Graphic Design & Multimedia Arts
Program of Study
Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **GRAPHIC DESIGN & MULTIMEDIA ARTS** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Arts, Audio/Video Technology & Communications	❑ Graphic Design & Illustration II
❑ Graphic Design I	❑ Commercial Photography II
❑ Commercial Photography I	❑ Practicum in Commercial Photography
❑ Digital Media	❑ Practicum in Graphic Design & Illustration

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

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

Master's, Doctoral, and Professional Degrees

- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Intermedia/Multimedia

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro
- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Visual Design
- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional In Visual Effects and Motion Graphics Using Adobe After Effects
- Audio-Visual Communications - Job Ready
- Autodesk Associate (Certified User) 3ds MAX
- Certified Professional Photographer
- Graphic Production Technology - Job Ready

- Adobe Certified Professional Animate*

*IBC Sunsetting 8/31/24

Aligned Occupations

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

Principles of Arts, Audio/Video Technology & Communications Course #: 0708400
Recommended Grade Placement: 8-9 1 Credit

In the Principles of Arts, Audio/ Video Technology & Communication course, students will gain experience in computer & technology applications and become proficient in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in courses like Records & Film, Printing Technology and much more.

Graphic Design I Course #: 07224260
Recommended Grade Placement: 9-11 1 Credit

This class will give students an opportunity to express and design creative ideas visually for a growing field. Art concepts and design strategies will be explored using design principles and art elements for creating logos, magazine covers, posters and more. Students will learn to create and design artwork for projects using Adobe Photoshop.

Commercial Photography I Course #: 07224360
Recommended Grade Placement: 9-11 1 Credit

Students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs. Students will learn commercial composition, print-making and editing photos in Photoshop.

Graphic Design & Illustration II Course #: 07224460
Recommended Grade Placement: 10-11 2 Credits
Prerequisite: Graphic Design & Illustration I

This advanced class will provide opportunities for students wanting to expand their skills and knowledge of graphic design. Students will use their knowledge to create projects including; food truck branding, logos, posters, magazine designs and will help the other classes with sports posters for both high schools. Students will learn and explore the t-shirt printing process and will assist the Practicum class with the design and print shop working with client projects.

Commercial Photography II Course #: 07224560

Recommended Grade Placement: 10-11 2 Credits

Prerequisite: Commercial Photography I

A course designed to provide job-specific training for entry-level employment in the commercial photography career field. Emphasis is on basics of photography, commercial composition, print-making & finishing, and advanced skills in Adobe Photoshop and Adobe Lightroom.

Practicum in Commercial Photography Course #: 07224850

Recommended Grade Levels: 11-12 2 Credits

Prerequisites: Commercial Photography I and Commercial Photography II

A course designed to provide job-specific commercial photography work study and/or internships, that affords students supervised practical application of previously acquired skills. Commercial Photography Practicum students will not only demonstrate advanced level photography and editorial skills, but the professionalism of both working with clients, and for clients. Commercial Photography Practicum clients can be in support of CISD, private ventures, public ventures, and the community at large. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Practicum in Graphic Design & Illustration Course #: 07224860

Recommended Grade Levels: 11-12 2 Credits

Prerequisites: Graphic Design & Illustration II

In this course, students develop a technical understanding of the industry with a focus on skill proficiency and client relations. Instruction may be delivered through lab-based classroom and in field internship experiences or career preparation opportunities. The instructor works as the manager with the student on a variety of projects taken from business and industry. The course allows the student to gain experience and understanding of the field in a job-like environment. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Digital Communications
Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **DIGITAL COMMUNICATIONS - CONCENTRATION IN VIDEO** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Arts, Audio/Video Technology & Communications	❑ Audio Video Production II
❑ Audio Video Production I	❑ Practicum in Audio/Video Production
❑ Professional Communications	
❑ Web Communications *(middle school course only)*	

Courses in the **DIGITAL COMMUNICATION - CONCENTRATION IN AUDIO** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Arts, A/V, and Communications	❑ Digital Audio Technology II
❑ Digital Audio Technology I	❑ Practicum in Audio/Video Production
❑ Professional Communications	
❑ Web Communications *(middle school course only)*	

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

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

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

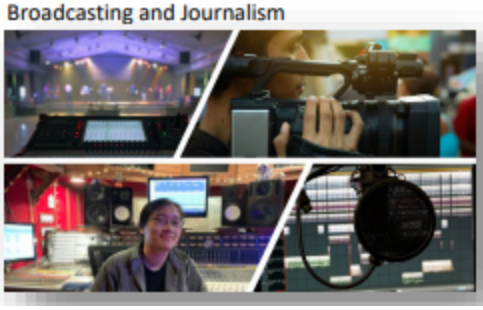
Master's, Doctoral, and Professional Degrees
- Communications Technology/Technician
- Cinematography and Film/Video Production
- Radio and Television
- Agricultural Communication/Journalism

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Visual Design
- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro
- Audio-Visual Communications - Job Ready
- Broadcasting and Journalism
-



Aligned Occupations

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

Principles of Arts, Audio/Video Technology, and Communications Course #: 07084000
Recommended Grade Placement: 8-9 1 Credit

In the Principles of Arts, Audio/ Video Technology & Communication course, students will gain experience in computer & technology applications and become proficient in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in courses like Records & Film, Printing Technology and much more.

Professional Communications Course #: 07224250
Recommended Grade Placement: 9 ½ Credit

Students will participate in a variety of communications settings designed to improve interpersonal skills which can be used in both professional and social settings. They will develop an understanding of delivery methods and practice the proper application of each, which will prepare them for success the remainder of their high school career and in their future endeavors. Group Problem Solving, concepts of teamwork and team building as well as development of leadership skills will be demonstrated and used by the student to help build confidence and improve their critical thinking skills. Students will practice and evaluate communication methods and styles to enhance understanding of the communication process and how to use effective communication to benefit themselves and others.

Audio/Video Production I Course #: 07224380
Recommended Grade Placement: 9-11 1 Credit

Students will be expected to develop an understanding of the industry with a focus on pre-production, post-production audio and live audio and video technical skills and concepts. Instruction will include operation of different types of cameras, audio techniques and equipment, electronic editing, graphics for TV, lighting and lighting control consoles, script writing, direction, production, and leadership training.

Audio/Video Production II Course #: 07224480
Recommended Grade Placement 11-12 2 Credits
Prerequisite: Audio Video Production I

A course designed to provide an advanced understanding of career opportunities, training requirements and skills needed to pursue a career in Audio and Video Production. Students will continue developing their skills in operating cameras, electronic editing, producing direction and writing for television/film. Working in this industry, students will be expected to have good communication and leadership skills.

Digital Audio Technology I Course #: 07224485
Recommended Grade Placement: 9-11 1 Credit

A course designed to provide students interested in audio production careers such as audio for radio and television broadcasting, audio for video and film, audio for animation and game design, music production and live sound instructing in developing skills for career implementation.

Digital Audio Technology II Course #: 07224490

Recommended Grade Placement: 11-12 2 Credit

Prerequisite: Digital Audio Technology I

A course designed to provide advanced opportunities in audio production careers such as audio for radio and television broadcasting, audio for video and film, audio for animation and game design, music production and live sound instruction in developing skills for career implementation.

Practicum in Audio/Video Production Course #: 07224880

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Audio Video Production II

This course allows students to develop an increasing understanding of the industry with a focus on applying pre-production, post-production and video products in a professional environment. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Programs of Study in the BUSINESS, MARKETING, AND FINANCE Pathway

Accounting and Financial Services

Business Management

Entrepreneurship

Accounting & Financial Services
Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **ACCOUNTING & FINANCIAL SERVICES** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Business, Marketing & Finance	❑ Accounting II
❑ Business Information Management I	❑ Practicum in Business Management
❑ Accounting I	
❑ Financial Math	
❑ Money Matters *(middle school course only)*	

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Accounting - Basic
- Accounting Foundations
- Certified Insurance Service Representative
- Intuit QuickBooks Certified User
- MB-920: Microsoft Dynamics 365 Fundamentals Finance and Operations Apps
- Microsoft Office Specialist: Microsoft Access Expert (Access and Access 2019) Microsoft Office Specialist: Microsoft Excel Expert (Excel and Excel 2019)
- Volunteer Income Tax Assistance/Tax Counseling Certification: Advanced
- Volunteer Income Tax Assistance/Tax Counseling Certification: Basic
- Volunteer Income Tax Assistance/Tax Counseling Certification: Volunteer for Elderly

- Microsoft Office Specialist-Excel*

*IBC sunsetting 8/31/24

Aligned Occupations

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

Principles of Business, Marketing & Finance Course #: 07082005
Recommended Grade Placement: 8 1 Credit

This course is designed to give students hands-on application in the study of Business Management, Finance, Marketing, Entrepreneurship, and Business and Information Management.

Business Information Management I (BIM I) Course #: 07222225
Recommended Grade Placement: 9-11 1 Credit

BIM I introduces the basic concepts and skills related to business application. Special emphasis is placed on word processing, spreadsheets, database, presentation, and integrating application software. A windows format is utilized, and Microsoft Office is the current program of choice.

Accounting I Course #: 07222450
Recommended Grade Placement: 10-11 1 Credit

This course introduces general accounting concepts, principles, and procedures; emphasizes the need for financial records; provides the fundamental equation and its application to accounting procedures, including the basic steps of the accounting cycle, special journals and ledgers, work sheets, adjusting and closing entries, special problems in the purchase and sale of merchandise, notes and interest, depreciation, accruals and prepaid items, payroll records, and personal income taxes. Accounting develops the knowledge, skills, and attitudes necessary for individuals to conduct personal business or to further an education in the field of accounting. Students complete practice sets or simulations, use calculators, and process some data electronically.

Accounting II Course #: 07222452
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Accounting I

This course provides for review and further development of fundamental accounting principles with extensive use of technology; incorporates a complete accounting cycle in relation to formation and dissolution of partnerships. Examines characteristics of corporate organization and ownership, including investments and distribution of earnings; includes adjustments of bad debts, depreciation, depletion of fixed assets, adjusted and accrued income, various methods of inventory control, preparation of business budgets and notes receivable and payable; provides experience in initiating and maintaining an accounting system and in analyzing, interpreting, and synthesizing managerial problems using accounting information as a tool; and develops skill in applying principles used in accounting systems and methods commonly found in business. Accounting II is designed for students interested in studying accounting at the postsecondary level or entering the workforce.

Financial Mathematics Course #: 07222460

Recommended Grade Placement: 11-12 1 Credit

Approved for math credit from State Board of Education | Prerequisite: Algebra 1

In this course, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a 3 solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, and number sense to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

Practicum in Business Management Course #: 07227970

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Two credits in the Accounting and Financial Services or Entrepreneurship program of study

The practicum or Coop course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Business, Marketing & Finance cluster. Students are required to serve in paid or unpaid internship opportunities. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Business Management
Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **BUSINESS MANAGEMENT** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Business, Marketing & Finance	❑ Business Management
❑ Business Information Management I	❑ Practicum in Business Management
❑ Business Information Management II	
❑ Business Law	

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

- Business Administration
- Business/Commerce
- Public Administration
- Business Management

Bachelor's Degrees

- Business Administration
- Business/Commerce
- Public Administration
- Management Science

Master's, Doctoral, and Professional Degrees

- Business Administration
- Business Management
- Public Administration
- Management Science

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Business Professional of America, Future Business Leaders of America, or DECA	• Intern with a local business or chamber of commerce

Industry-Based Certifications

- Administrative Assisting
- Certified Associate in Project Management (CAPM)
- Entrepreneurship and Small Business
- MB-920: Microsoft Dynamics 365 Fundamentals Finance and Operations Apps
- Microsoft Office Specialist 2016 Master
- Microsoft Office Specialist: Microsoft Access Expert (Access and Access 2019)
- Microsoft Office Specialist: Microsoft Excel Expert (Excel and Excel 2019)
- Microsoft Office Specialist: Microsoft Word Expert (Word and Word 2019)
- Project Management Institute (PMI) Project Management Ready

- Microsoft Office Specialist-Excel*
- Microsoft Office Specialist-Word*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Administrative Service Managers	$96,138	2,277	21%
Management Analysts	$87,651	4,706	32%
General and Operations Managers	$107,640	18,679	20%
Supervisors of Administrative Support Works	$57,616	14,982	20%

Principles Of Business, Marketing & Finance Course #: 07082005

Recommended Grade Placement: 8 1 Credit

This course is designed to give students hands-on application in the study of Business Management, Finance, Marketing, Entrepreneurship, and Business and Information Management.

Business Information Management (BIM) Course #: 07222225

Recommended Grade Placement: 9-11 1 Credit

BIM I introduces the basic concepts and skills related to business application. Special emphasis is placed on word processing, spreadsheets, database, presentation, and integrating application software. A windows format is utilized, and Microsoft Office is the current program of choice.

Business Information Management II Course #: 07222325

Recommended Grade Placement: 11-12 1 Credit

This course is a continuation of BIM I with emphasis on more in-depth features of Word, Excel, and PowerPoint. Students will also be working in Access and Publisher. This course prepares students to take the Microsoft Office Specialist (MOS) certification exam. This is a global certification that is a standard requirement among employers

Business Law Course #: 07222425

Recommended Grade Placement: 10-11 1 Credit

Prerequisite: Principles of Business, Marketing, and Finance

Business Law is designed to teach students the rules, principles, and language of law. Students will relate law to their current lives as well as explore the implications in their futures. The course includes a focus on criminal vs. civil law, contract law, tort law, and consumer protection law.

Business Management Course #: 07222003

Recommended Grade Placement: 10-11 1 Credit

Recommended Prerequisite: Principles of Business, Marketing, and Finance

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 Course #: 07227970

Recommended Grade Placement: 11-12 2 Credits

Recommended Prerequisite: Two credits in the Accounting and Financial Services or Entrepreneurship program of study

The practicum or Coop course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Business, Marketing & Finance cluster. Students are required to serve in paid or unpaid internship opportunities. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Business I Certification

College Credit Opportunity - Tarrant County College

Crowley ISD offers dual credit courses in Business to achieve a certification in Business. These courses are offered through Tarrant County College and tuition is waived. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.

Entrepreneurship Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **ENTREPRENEURSHIP** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Business, Marketing & Finance	❑ Entrepreneurship II
❑ Business Information Management I	❑ Practicum in Business Management
❑ Entrepreneurship I	

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

- Business Administration and Management
- Business/Commerce
- Public Administration
- Management Science

Master's, Doctoral, and Professional Degrees

- Business Administration and Management
- Business/Commerce
- Public Administration
- Management Science

Work-Based Learning and Expanded-Learning Opportunities

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

Industry-Based Certifications

- Entrepreneurship and Small Business
- Facebook Digital Marketing Associate Certification

Aligned Occupations

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

Principles Of Business, Marketing & Finance Course #: 07082005
Recommended Grade Placement: 8 1 Credit

This course is designed to give students hands-on application in the study of Business Management, Finance, Marketing, Entrepreneurship, and Business and Information Management.

Business Information Management I (BIM I) Course #: 07222225
Recommended Grade Placement: 9-11 1 Credit

BIM I introduces the basic concepts and skills related to business application. Special emphasis is placed on word processing, spreadsheets, database, presentation, and integrating application software. A windows format is utilized, and Microsoft Office is the current program of choice

Entrepreneurship I Course #: 07227200
Recommended Grade Placement: 10-11 1 Credit

Students will gain the knowledge and skills to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan and securing the finances to own and operate a business.

Entrepreneurship II Course #: 07227205
Recommended Grade Placement: 11-12 1 Credit
Prerequisite: Entrepreneurship I

Students will work in close cooperation with local industry leaders, community members, and educators to develop ideas and objectives, complete a business model canvas, pitch to potential investors, register with governmental agencies, and develop brand identity. The goal and outcome of the course is to have a business launched by the end of the course or have the tools necessary to launch and operate a business.

Practicum in Business Management Course #: 07227970
Recommended Grade Placement: 11-12 2 Credits
Prerequisite: Two credits in the Accounting and Financial Services or Entrepreneurship program of study

The practicum or Coop course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Business, Marketing & Finance cluster. Students are required to serve in paid or unpaid internship opportunities. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills. *A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.*

Programs of Study in the EDUCATION AND TRAINING Pathway

Early Learning

Teaching and Training

Early Learning Program of Study

Public Services Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **EARLY LEARNING** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Human Services	❑ Child Guidance
❑ Child Development	❑ Practicum in Early Learning
❑ Principles of Education & Training	

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Early Childhood
- Psychology/Sociology

Master's, Doctoral, and Professional Degrees

- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Educational, Instructional, and Curriculum Supervision
- Educational Leadership and Administration

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Child Development Associate (CDA)
- Early Childhood Education and Care – Advanced
- Early Childhood Education and Care – Basic
- Educational Aide 1
- Pre-Professional Certification in Early Childhood Education

Aligned Occupations

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

Principles of Human Services Course #: 07083000

Recommended Grade Placement: 8 1 Credit

This course is designed to give students hands-on application in the Programs of Study of Education & Training and Human Services. Topics include: Child Development, Human Growth, Counseling and Mental Health, and Family and Community Services.

Child Development Course #: 07225210

Recommended Grade Placement: 9-10 1 Credit

This course addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

Principles of Education & Training Course #: 07095010

Recommended Grade Placement: 9-10 1 Credit

This course is designed to introduce students to the various careers available in education.

Child Guidance Course #: 07223320

Recommended Grade Placement: 11-12 2 Credits

Child Guidance is a two-credit course where students will apply their knowledge of Child Development principles to a hands-on experience at a child development center while improving their employability skills. They will practice developing and implementing activities for preschool age children at a childcare facility and earn their Child Development Associate credential.

Practicum in Early Learning Course #: 07125920

Recommended Grade Placement: 12 2 Credits

Practicum in Early Learning is a field-based internship that provides students background knowledge of early childhood 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 facilitator and an exemplary industry professional. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of early learning teachers, trainers, paraprofessionals, or other educational personnel.

Teaching and Training
Program of Study
Public Service Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **TEACHING AND TRAINING** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Human Services	❑ Instructional Practices
❑ Human Growth & Development	❑ Practicum in Education & Training
❑ Principles of Education & Training	

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

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

Master's, Doctoral, and Professional Degrees

- Instruction and Learning
- Educational Leadership and Administration, General
- Special Education
- Social and Philosophical Foundations of Education

Industry-Based Certifications

- Educational Aide I

Work-Based Learning and Expanded Learning Opportunities

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

Aligned Occupations

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

Principles of Human Services Course #: 07083000

Recommended Grade Placement: 8 1 Credit

This course is designed to give students hands-on application in the Programs of Study of Education & Training and Human Services. Topics include: Child Development, Human Growth, Counseling and Mental Health, and Family and Community Services.

Human Growth & Development Course #: 07105110

Recommended Grade Placement: 10 1 Credit

Human Growth and Development is an examination of human development across the lifespan with emphasis upon research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones.

Principles of Education & Training Course #: 07095010

Recommended Grade Placement: 9-10 1 Credit

This course is designed to introduce students to the various careers available in education.

Instructional Practices Course #: 07225510

Recommended Grade Placement: 11-12 2 Credits

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. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel. Students will intern in a local CISD elementary, intermediate, or middle school.

Practicum In Education & Training Course #: 07225910

Recommended Grade Placement: 12 2 Credits

Prerequisite: Instructional Practice in Education & 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. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel. Students will intern in a local CISD elementary, intermediate, or middle school. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Programs of Study in the HEALTH SCIENCE Pathway

Healthcare Therapeutic - Medical Assistant

Healthcare Therapeutic - Pharmacy Technician

Healthcare Therapeutic
Program of Study
Public Services Endorsement

The **Healthcare Therapeutic** program of study introduces students to occupations and educational opportunities related to diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study holds students to professional high standards needed in various healthcare. Students are required to purchase uniforms and some classes have fees associated with them. Please see the board approved the listing of fees for details. Students are encouraged to participate in Health Occupations Students of American (HOSA).

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **HEALTHCARE THERAPEUTIC** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Medical Terminology *(must be paired with Health Science Theory)*	❑ Health Science Theory *(must be paired with Medical Terminology)*
❑ Pharmacy I	❑ Anatomy & Physiology
	❑ Pharmacy II
	❑ Mathematics for Medical Professionals
	❑ Medical Assistant
	❑ Pathophysiology
	❑ Practicum in Health Science

Course Sequences for HEALTHCARE THERAPEUTICS Concentrations

Medical Assistant	Health Science Theory & Medical Terminology	Anatomy and Physiology	Medical Assistant	Practicum in Health Science and/or Pathophysiology
Pharmacy Technician	Introduction to Pharmacy Science	Pharmacy I	Pharmacy II and Mathematics for Medical Professionals	Practicum in Health Science - Pharmacy
Emergency Services/EMT	Medical Terminology & Health Science Theory or Principles of Law	Counseling and Mental Health	Anatomy & Physiology, Disaster Response, DC ENGL 1301, & DC MUSI 1306	EMT Basic (HS Course), DC COSC 1301, DC GOVT 2305/2306, EMSP 1501, & EMSP 1160

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees
- Dental Hygienist
- Medical/Clinical Assistant

Bachelor's Degrees
- Dental Hygienist

Master's, Doctoral, and Professional Degrees
- Dentist
- Physician Assistant
- Family and General Practitioners
- Pharmacist

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Certified Clinical Medical Assistant
- Certified Dental Assistant
- Certified EKG Technician
- Emergency Medical Technician - Basic
- Certified Nurse Aide (CNA)
- Certified Occupational Therapy Assistant
- Certified Patient Care Technician (CPCT)
- ECG Technician
- Medical Assistant
- Medical Laboratory Assistant
- Nationally Registered Certified EKG Technician
- Patient Care Technician
- Pharmacy Technician
- Phlebotomy Technician
- Registered Dental Assistant X-Ray Certification

- Certified Ophthalmic Technician*
- Certified Surgical Technologist*
- Licensed Dental Hygienist*
- Orthopedic Technologist*

*IBC sunsetting 8/31/24

Aligned Occupations

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

Pharmacy Technician Certificate

College Credit Opportunity - Lamar State College in Port Arthur

Crowley ISD offers dual credit courses in Pharmacy to achieve a Pharmacy Technician Certificate. These courses are offered through Lamar State College in Port Arthur and tuition is waived. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.

Emergency Medical Technician Certification

College Credit Opportunity – Tarrant County College

Crowley ISD offers dual credit courses in Emergency Medical Technician to achieve an EMT basic credential. These courses are offered through Tarrant County College and tuition is waived. Students must be enrolled in Tarrant County College. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.

Medical Terminology Course #: 07226001

Recommended Grade Placement: 9-11 1 Credit

Must be paired with Health Science Theory

The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology. Students are encouraged to participate in Health Occupations Students of American (HOSA).

Introduction to Pharmacy Science Course #: 07226451

Recommended Grade Placement: 9 1 Credit

The Introduction to Pharmacy Science course is designed to provide an overview of the history of the pharmacy profession, legal and ethical aspects of pharmacy, skills necessary to work in the field of pharmacy (including professionalism, certifications/registration, communication and medical terminology, and rules and regulations pertaining to the field), medical math, anatomy and physiology/pathophysiology, pharmacology, and wellness as

they pertain to pharmacy sciences. It is the first course in a pathway leading to certification as a pharmacy technician.

Pharmacy I Course #: 07226455

Recommended Grade Placement: 10-11 1 Credit

The Pharmacy I course is designed to build upon the knowledge and skills taught in the Introduction to Pharmacy Science course. Students build on their existing foundation of knowledge and skills needed to pursue a career in the pharmaceutical field such as a pharmacy technician or pharmacist). Instruction includes pharmacokinetics, pharmacy law, medication safety, the dispensing process, and inventory. This course is aligned with the standards of the national certification exams that students might take, such as Pharmacy Technician Certification Examination (PTCE) and/or Exam for the Certification of Pharmacy Technicians (ExCPT). Recommended participants are students who wish to become certified pharmacy technicians.

Pharmacy II Course #: 07226465

Recommended Grade Placement: 11 2 Credits

The Pharmacy II course provides students with the advanced knowledge and skills to explore various careers in the pharmacy field, including pharmacology, pharmacy law, medication errors, inventory pharmacy calculations, compounding, and workflow expectations in a pharmacy setting.

Health Science Theory Course #: 07226100

Recommended Grade Placement: 9-10 1 Credit

Must be paired w/Medical Terminology | Prerequisite: Biology

A course designed to develop healthcare-specific knowledge and skills in professionalism, effective communications, ethical and legal responsibilities, client care, safety, first aid, and CPR. This class will introduce various healthcare jobs including phlebotomy technician, EKG technician, medical assistant, patient care technician and pharmacy technician. This course prepares the student for the transition to clinical or work-based learning experiences in healthcare with various hands-on skills and activities. This class is a prerequisite to take practicum in health science, where certifications including Certified Patient Care Technician, Certified Pharmacy Technician, and Certified Medical Assistant are earned. Students are encouraged to participate in Health Occupations Students of American (HOSA).

Mathematics for Medical Professionals Course #: 07226470

Recommended Grade Placement: 11-12 1 Credit

Prerequisites: Geometry and Algebra II

The Mathematics for Medical Professionals course is designed to embed statistics, probability, and finance, while focusing on fluency and solid understanding in medical mathematics. Students will extend and apply mathematical skills necessary for health science professions. Course content consists primarily of high school level mathematics concepts and their applications to health science professions.

Anatomy & Physiology Course #: 03120900

Recommended Grade Placement: 10-12 1 Credit

Counts as a Science credit | Prerequisite: Biology and a second science credit

This course will take an integrated approach to functional anatomy with emphasis on basic principles and physiological activities of different systems (skeletal, muscular, digestive, respiratory, cardiovascular, urinary, endocrine, reproductive) in mammals. Laboratory experiences will include extensive study and dissection of a mammal. The text, content, and labs are college-level and are designed for students planning to major in science in college. The goal of this course is to better prepare students for undergraduate work in life science majors such as pre-medical, pre-dental, pre-pharmacist, nursing, athletic trainers, and other healthcare professionals that require anatomy and physiology in college. Students are encouraged to participate in Health Occupations Students of American (HOSA).

Medical Assistant Course #: 07226700

Recommended Grade Placement: 11-12 1 Credit

This course provides students with the knowledge and skills to pursue a career as a medical assistant and to improve college and career readiness. Students will learn communication skills, clinical ethics knowledge, safety awareness, and information related to medical assisting career opportunities.

Pathophysiology Course #: 07226400

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board of Education for 4th science credit | Prerequisite: Biology and Chemistry

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Students study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of diseases. Students will differentiate between normal and abnormal physiology. Students are encouraged to participate in Health Occupations Students of American (HOSA).

Practicum In Health Science Course #: 07226500

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Health Science Theory and Biology

The practicum course is a paid or unpaid capstone experience for students participating in the Health Science Program of Study. Students sit to pass national exams and become a Certified Patient Care Technician, Certified Pharmacy Technician, and Certified Medical Assistant. This is an internship program for specific health professions. Students participate in a clinical internship at local healthcare facilities. Students are encouraged to participate in Health Occupations Students of American (HOSA). Students should be prepared to submit to an FBI criminal background check, random drug screening, TB testing, state fingerprint licensure, state or government-issued ID, and to present a proof of current immunizations and valid Social Security Card. Other stipulations may also be in place depending on internship requirements including but not limited to student dress and appearance. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

For information on the Emergency Services (EMT) program of Study, see the LAW AND PUBLIC SERVICE Pathway.

Programs of Study in the

HOSPITALITY AND TOURISM

Pathway

Culinary Arts

Culinary Arts Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **CULINARY ARTS** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Hospitality & Tourism	❑ Advanced Culinary Arts
❑ Introduction to Culinary Arts	❑ Practicum in Culinary Arts
❑ Culinary Arts	❑ Food Science

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Culinary Science and Food Service Management

Master's, Doctoral, and Professional Degrees

- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Business Administration Management, General

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Certified Fundamentals Cook
- Certified Fundamentals Pastry Cook
- Certified Hospitality & Tourism Management Professional
- Commercial Foods
- Culinary Meat Selection & Cookery Certification
- Food Protection Manager Certification
- Food Safety & Science Certification
- ManageFirst Professional
- Pre-Professional Certification in Culinary Arts
- Pre-Professional Certification in Food Science Fundamentals
- ServSafe Manager

Aligned Occupations

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

Culinary Arts Foundation Certificate

College Credit Opportunity - Lamar State College in Port Arthur

Crowley ISD offers dual credit courses in Culinary to achieve a Culinary Arts Foundation Certificate. These courses are offered through Lamar State College in Port Arthur and tuition is waived. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.

Principles of Hospitality & Tourism Course #: 07085000
Recommended Grade Placement: 8 1 Credit

This course is designed to give students hands-on application in the Program of Study of Culinary Arts and Hospitality & Tourism.

Introduction to Culinary Arts Course #: 07225275
Recommended Grade Placement: 9-10 1 Credit

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 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 will be offered with a commercial kitchen used as a laboratory. Students are encouraged to participate in extended learning experiences which may include career and technical student organizations, and other leadership or extracurricular organizations.

Culinary Arts Course #: 07225280
Recommended Grade Placement: 10-11 2 Credits

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification or other appropriate industry certifications. This course will be offered with a commercial kitchen used as a laboratory. Students are encouraged to participate in extended learning experiences which may include practicum hours, career and technical student organizations, and other leadership or extracurricular organizations.

Advanced Culinary Arts Course #: 07225895

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Culinary Arts

This course is a unique advanced course that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Advanced 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. Students are taught employability skills, which include job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development.

Practicum in Culinary Arts Course #: 07225880

Recommended Grade Placement: 12 2 Credits

Prerequisite: Advanced Culinary Arts

This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards in order to prepare students for success in higher education, certification, and/or immediate employment. Students receive hands-on practical experience in all aspects of food preparation and production. Coursework begins with food preparation techniques and progresses. Students are encouraged to participate in extended learning experiences which may include practicum hours, career and technical student organizations, and other leadership or extracurricular organizations. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Food Science Course #: 07225890

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board of Education for science credit | Prerequisite: Three units of science, including chemistry and biology

This technical laboratory course provides foundational training in the area of food science and technology. Content addresses food science principles; nutrition and wellness; food technology; world food supply; managing multiple family, community, and career roles; and career options in nutrition, food science, and food technology. Instructional topics include diet-related disorders, diets appropriate to the life cycle and other factors, therapeutic diets, chemical and physical changes that affect food product quality, technologies used in food processing and product development, food safety and sanitation standards, market research, legal issues, and food policies. Laboratory activities utilizing research methods related to current issues in food science, technology, and nutrition are included.

Programs of Study in the HUMAN SERVICES Pathway

Cosmetology

Barbering

Family and Community Services

Cosmetology & Barbering Program of Study

Public Service Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **COSMETOLOGY** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Microbiology & Safety for Cosmetology Careers	❑ Cosmetology I
❑ Principles of Cosmetology Design & Color Theory	❑ Cosmetology II

This program meets the Texas Department of Licensing and Regulation requirements for licensure upon successful completion of the course sequence and passing the state examinations at the end of Cosmetology II. Students will participate in Skills USA and also be involved in client services.

NOTE: Associated fees for the Cosmetology program are $300.00. The fees by grade level are freshman $50.00 this includes TDLR permit and manikin (Emily), sophomore $50.00 Manikin (Debra), junior $50.00 Manikin (Debra) and senior $150.00 State board kit and male manikin. Also, all students are required to participate in Skills USA. The fee for participation is $31.00.

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Certificate/License

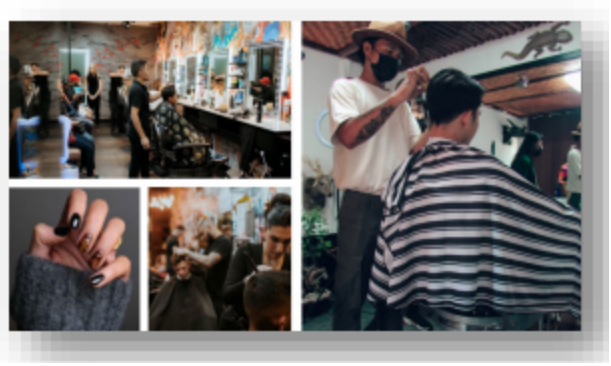
- Certified Aesthetic Laser Operator
- Cosmetologist
- Certified Spa Supervisor
- Nail Technician/Specialist and Manicurist

Associates Degrees

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

Industry-Based Certifications

- Cosmetology Operator License
- Cosmetology Esthetician Specialty License
- Cosmetology Manicurist Specialty License
- Barber Operating License



Work-Based Learning and Expanded Learning Opportunities

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

Aligned Occupations

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

Microbiology & Safety for Cosmetology Careers Course #: 07223105
Recommended Grade Placement: 9 1 Credit

Students will receive instruction in the microbial world, studying topics such as pathogenic and no-pathogenic microorganisms, drug resistant organisms, and emerging diseases. Students may become certified in the Occupational Safety and Health Administration (OSHA) safety training course. This course includes an in depth analytical opportunity for students to problem solve health and safety in cosmetology.

Principles of Cosmetology Design & Color Theory Course #: 07223205
Recommended Grade Placement: 10 1 Credit

In Principles of Cosmetology Design and Color Theory, 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 TDLR requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.

Cosmetology I Course #: 07223200
Recommended Grade Placement: 11 2 Credits

Students coordinate the integration of academic, career, technical knowledge and provide salon services. This instructional sequenced course is designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care. This program meets the Texas Department of Licensing and Regulation requirements for licensure upon successful completion of the course sequence and passing the state examinations at the end of Cosmetology II. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.

Cosmetology II Course #: 07223300
Recommended Grade Placement: 12 3 Credits *Prerequisite: Cosmetology I*

Students review academic and practical knowledge related to cosmetology. This course is designed to provide advanced skill set training as well as employment preparation for a cosmetology career. Instruction includes advanced training in sterilization and sanitation processes, hair care, nail care, and skin care. This program meets the Texas Department of Licensing and Regulation requirements for licensure upon successful completion of the course sequence and passing the state examinations. Students apply, combine, and justify knowledge and skills to a variety of settings and problems. Because of scheduling constraints for students, those interested in completing this program are encouraged to earn at least one required graduation credits outside of the regular school day/year.

In order to complete the licensure exam for Cosmetology, students are required to take all four courses in the Cosmetology program of study.

Course Sequence for BARBERING				
Barbering		Microbiology and Safety for Cosmetology Careers	Barbering I	Barbering II

Barbering I Course #: 07110100

Recommended Grade Placement: 11 3 Credits

In Barbering I, students coordinate integration of academic, career, and technical knowledge and skills in a laboratory instructional sequence of courses designed to provide job-specific training for employment in barbering careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation (TDLR) requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.

Barbering II Course #: 07120100

Recommended Grade Placement: 12 3 Credits

In Barbering II, instruction includes advanced training in professional standards/employability skills; Texas Department of Licensing and Regulation (TDLR) rules and regulations; use of tools, equipment, technologies and materials; and practical skills. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.

Family and Community Service
Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **FAMILY AND COMMUNITY SERVICES** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Human Services	❑ Counseling and Mental Health
❑ Child Development	❑ Family & Community Services
❑ Professional Communications	❑ Practicum in Human Services
❑ Interpersonal Studies *(middle school course only)*	
❑ Dollars and Sense *(middle school course only)*	
❑ Lifetime Nutrition and Wellness *(middle school course only)*	

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees
- Human Development and Family Studies
- Human Services/Sciences, General
- Family and Consumer Sciences
- Community Health Services

Bachelor's Degrees
- Human Development and Family Studies
- Human Services/Sciences, General
- Family and Consumer Sciences
- Child and Family Services

Master's, Doctoral, and Professional Degrees
- Human Development and Family Studies
- Marriage and Family Therapy/Counseling
- Human Services/Sciences
- Family Studies

Industry-Based Certifications

- Community Health Workers
- Child Development Associate (CDA)

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in American Association of Family and Consumer Sciences or Family, Career and Community Leaders of America	• Volunteer at a community center • Intern for a community non-profit organization

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Child, Family, and School Social Workers	$41,350	2,221	17%
Social and Community Services Managers	$65,146	608	33%
Marriage and Family Therapists	$42,266	217	35%
Social and Human Service Assistants	$32,448	2,822	25%

Principles of Human Services Course #: 07083000

Recommended Grade Placement: 8 1 Credit

This course is designed to give students hands-on application in the Programs of Study of Education & Training and Human Services. Topics include: Child Development, Human Growth, Counseling and Mental Health, and Family and Community Services.

Professional Communications Course #: 07224250

Recommended Grade Placement: 9 ½ Credit

Students will participate in a variety of communications settings designed to improve interpersonal skills which can be used in both professional and social settings. They will develop an understanding of delivery methods and practice the proper application of each, which will prepare them for success the remainder of their high school career and in their future endeavors. Group Problem Solving, concepts of teamwork and team building as well as development of leadership skills will be demonstrated and used by the student to help build confidence and improve their critical thinking skills. Students will practice and evaluate communication methods and styles to enhance understanding of the communication process and how to use effective communication to benefit themselves and others.

Child Development Course #: 07225210

Recommended Grade Placement: 9-10 1 Credit

This course addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

Counseling and Mental Health Course #: 07226200

Recommended Grade Placement: 10-11 1 Credit

This course offers knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. 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.

Family & Community Services Course #: 07223330

Recommended Grade Placement: 11-12 1 Credit

This laboratory-based course is designed to involve students in realistic and meaningful community-based activities through direct service experiences. Students are provided opportunities to interact and provide services to individuals, families, and the community through community or volunteer services. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics. This course is a perfect opportunity to gather experience in volunteer and service projects for college and career applications. Students will be placed in an internship on campus during this course.

Practicum In Human Services Course #: 07223920

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Two courses in the Family and Community Service program of study

Practicum in Human Services provides occupationally specific training and focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community services careers. Students are required to serve in paid or unpaid internship opportunities. Students must provide transportation to internship opportunities. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Programs of Study in the INFORMATION TECHNOLOGY Pathway

Information Technology Support and Services

Networking Systems

Information Technology Support and Services Program of Study

Business and Industry Endorsement

The **Information Technology Support and Services** program of study explores the occupations and educational opportunities associated with administering, testing, and implementing databases and applying knowledge of database management systems. This program of study may also include analyzing user requirements and problems to automate or improve existing systems and review computer system capabilities. This program of study may also include exploration into the research, design, or testing of computer or computer-related equipment for commercial, industrial, military, or scientific use.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **INFORMATION TECHNOLOGY SUPPORT AND SERVICES** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Information Technology	❑ Practicum of Information Technology
❑ Computer Maintenance	❑ Computer Technician Practicum

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

- Computer and Information Sciences, General
- Computer and Information Systems Security/ Information Assurance
- Information Technology
- Computer Systems Networking and Telecommunications

Bachelor's Degrees

- Computer and Information Sciences, General
- Computer and Information Systems Security /Information Assurance
- Computer Engineering, General
- Computer Systems Networking and Telecommunications

Master's, Doctoral, and Professional Degrees

- Computer and Information Sciences, General
- Computer Systems Analysis/ Analyst
- Computer Engineering, General
- Information Technology

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join TSA • Job shadow a database administrator or computer hardware engineer	• Earn an IT certification

Industry-Based Certifications

- Business Information Processing
- Cloud Essentials+
- CompTIA A+ Certification
- CompTIA IT Fundamentals+
- Computer Repair Technology - Job Ready
- Google IT Support Professional Certificate

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Database Administrator	$83,075	1,063	19%
Computer Hardware Engineer	$111,738	343	24%
Computer System Analyst and Support	$87,568	5,937	29%

Principles of Information Technology Course #: 07084500

Recommended Grade Placement: 9 1 Credit

In this course, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment.

Computer Maintenance Course #: 07224520

Recommended Grade Placement: 9-10 1 Credit

Students acquire principles of computer maintenance, including electrical and electronic theory, computer hardware principles, and broad level components related to the installation, diagnosis, service, and repair of computer systems.

Computer Technician Practicum Course #: 0722472

Recommended Grade Placement: 10-11 2 Credits

Prerequisite: Computer Maintenance

In the Computer Technician Practicum, students will gain knowledge and skills in the area of computer technologies, including advanced knowledge of electrical and electronic theory, computer principles, and components related to the installation, diagnosis, service, and repair of computer-based technology systems. Proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an instructor, industry mentor, or both.

Practicum Information Technology Course #: 07222240

Recommended Grade Placement: 12 2 Credits

Prerequisite: At least two credits of Information Technology

Research in IT is a project-based research course for students who have the ability to research a real-world technological problem. Students develop a project on a topic related to information technology career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, apply information technology concepts, 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, skills, and technologies in a variety of settings.

Networking Systems
Program of Study

Business and Industry Endorsement

The **Networking Systems** program of study explores the occupations and educational opportunities associated with designing and implementing computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. This program of study may also include exploration into analyzing science, engineering, and other data processing problems to implement and improve computer systems.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **NETWORK SYSTEMS** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Information Technology	❑ Networking
❑ Computer Maintenance	❑ Practicum of Information Technology
❑ Computer Science I	
❑ AP Computer Science Principles	

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees
- Computer and Information Sciences, General
- Computer Systems Networking And Telecommunications
- Information Technology
- Network and System Administration/ Administrator

Bachelor's Degrees
- Computer and Information Sciences, General
- Computer Systems Networking And Telecommunications
- Computer and Information Systems Security/ Information Assurance
- Computer Engineering, General

Master's, Doctoral, and Professional Degrees
- Computer and Information Sciences, General
- Information Technology
- Computer and Information Systems Security/ Information Assurance
- Computer Engineering, General

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join TSA • Job shadow a computer network architect or support specialist	• Earn an IT certification

Industry-Based Certifications

- Cisco 100-490 RSTECH Supporting Cisco Routing and Switching Network Devices
- Cisco CCNA (200-301) Implementing and Administering Cisco Solutions
- CompTIA A+ Certification
- CompTIA Network+
- CompTIA Server+
- Computer Networking Fundamentals - Job Ready
- Google Cloud Certified Professional - Cloud Architect

- Associate of (ISC)*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Computer Network Architects	$111,633	1,082	23%
Computer Systems Analysts	$87,568	5,937	29%
Computer Network Support Specialists	$68,037	1,824	19%

Principles of Information Technology Course #: 07084500
Recommended Grade Placement: 9 1 Credit

In this course, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment.

Computer Science I Course #: 07222205
Recommended Grade Placement: 9-10 1 Credit *Prerequisite: Algebra I*

Students will access, analyze, and evaluate all types of information in ways that are computable in order to solve problems that range in scope from computing a speeding ticket to instructing a robot to dance, from designing interactive, intelligent fashion garments to creating a mobile app game. Students are exposed to the vast and diverse world of computer science, working collaboratively and individually on projects and learning a variety of programming languages, both graphical and text-based, to use in implementing their solutions. This is the first in the sequence of computer science courses offered for students in the computer science program of study, STEM endorsement. This is an advanced academic course and is weighted in the GPA. ***This course receives weighted GPA credit.***

Computer Maintenance Course #: 07224520
Recommended Grade Placement: 9-10 1 Credit

Students acquire principles of computer maintenance, including electrical and electronic theory, computer hardware principles, and broad level components related to the installation, diagnosis, service, and repair of computer systems.

AP Computer Science Principles Course #: 07222209
Recommended Grade Placement: 9-10 1 Credit

In this course, students will learn the principles that underlie the science of computing and develop the thinking skills that computer scientist use. Students will work on their own and as part of a team to creatively address real-world issues using the tools and processes of computation.

Networking Course #: 07224620

Recommended Grade Placement: 11-12 1 Credit *Recommended*

Prerequisite: Computer Maintenance

In Networking, students will develop knowledge of the concepts and skills related to data networking technologies and practices in order to apply them to personal or career development. To prepare for success, students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Practicum Information Technology Course #: 07222240

Recommended Grade Placement: 12 2 Credits *Prerequisite: At least two credits of Information Technology*

Research in IT is a project-based research course for students who have the ability to research a real-world technological problem. Students develop a project on a topic related to information technology career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, apply information technology concepts, 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, skills, and technologies in a variety of settings.

Programs of Study in the LAW AND PUBLIC SERVICE Pathway

Emergency Services

Law Enforcement

Legal Studies

Emergency Services Program of Study

Law and Public Service Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **EMERGENCY SERVICES** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Law, Public Safety, Correction & Security	❑ Health Science Theory
❑ Principles of Health Science	❑ Emergency Medical Technician - Basic (this course is mandatory for the POS)
❑ Disaster Response	❑ Anatomy & Physiology
❑ Medical Terminology	❑ Counseling & Mental Health
	❑ Practicum in Law, Public Safety, Corrections and Security

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

- Emergency Medical Technology/Technician (EMT Paramedic)
- Fire Prevention and Safety Technology/Technician
- Fire Science/Firefighting

Bachelor's Degrees

- Emergency Medical Technology/Technician (EMT Paramedic)
- Natural Resources Law Enforcement and Protective Services

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Attend local emergency awareness events • Join the Texas Public Service Association	• Volunteer at a hospital or a fire station

Industry-Based Certifications

- Basic Structure Fire Protection
- Emergency Medical Responder
- Emergency Medical Technician - Basic
- IAED Emergency Telecommunicator
- OSHA Hazardous Waste Operations and Emergency Response*

*IBC sunsetting 8/31/24

Aligned Occupations

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

Principles of Law, Public Safety, Corrections & Security Course #: 07099000
Recommended Grade Placement: 9 1 Credit

This course is designed to give students hands-on application in the Programs of Study of Law and Public Services. Topics include: Law Enforcement, Criminal Investigation, Court Systems, and Emergency Response.

Disaster Response Course #: 07229230
Recommended Grade Placement: 11 1 Credit

Disaster Response includes basic training of students in disaster survival and rescue skills that would improve the ability of citizens to survive until responders or other assistance could arrive. Students will receive education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues and disasters of all kinds.

Health Science Theory Course #: 07226100
Recommended Grade Placement: 9 1 Credit
Must be paired w/Medical Terminology | Corequisite: Biology

A course designed to develop healthcare-specific knowledge and skills in professionalism, effective communications, ethical and legal responsibilities, client care, safety, first aid, and CPR. This class will introduce various healthcare jobs including phlebotomy technician, EKG technician, medical assistant, patient care technician and pharmacy technician. This course prepares the student for the transition to clinical or work-based learning experiences in healthcare with various hands-on skills and activities. This class is a prerequisite to take practicum in health science, where certifications including Certified Patient Care Technician, Certified Pharmacy Technician, and Certified Medical Assistant are earned. Students are encouraged to participate in Health Occupations Students of American (HOSA).

Emergency Medical Technician Basic Course #: 07229240
Recommended Grade Placement: 11-12 2 Credits
Prerequisite: Biology

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

Anatomy & Physiology Course #: 03120900

Recommended Grade Placement: 11-12 1 Credit

Counts as a Science credit | Prerequisite: Biology and a second Science credit

This course will take an integrated approach to functional anatomy with emphasis on basic principles and physiological activities of different systems (skeletal, muscular, digestive, respiratory, cardiovascular, urinary, endocrine, reproductive) in mammals. Laboratory experiences will include extensive study and dissection of a mammal. The text, content, and labs are college-level and are designed for students planning to major in science in college. The goal of this course is to better prepare students for undergraduate work in life science majors such as pre-medical or pre-dental studies.

Law Enforcement Program of Study

Law and Public Service Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **LAW ENFORCEMENT** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Law, Public Safety, Corrections & Security	❑ Correctional Services
❑ Law Enforcement I	❑ Forensic Psychology
❑ Criminal Investigation	❑ Forensic Science
	❑ Practicum in Law, Public Safety, Corrections and Security

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

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

Master's, Doctoral, and Professional Degrees

- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Natural Resources
- Law Enforcement and Protective Services

Industry-Based Certifications

- Non-Commissioned Security Officer Level II

Work-Based Learning and Expanded Learning Opportunities

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

Aligned Occupations

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

Principles of Law, Public Safety, Corrections, and Security Course #: 07099000
Recommended Grade Placement: 9 1 Credit

This course is designed to give students hands-on application in the Programs of Study of Law and Public Services, including Law Enforcement, Criminal Investigation, Court Systems, and Emergency Response.

Law Enforcement I Course #: 07229110
Recommended Grade Placement: 10-11 1 Credit

Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. This course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime. Students can pursue national certifications in CPR (Cardiopulmonary Resuscitation) and CERT (The Community Emergency Response Team) Program.

Criminal Investigation Course #: 07229105
Recommended Grade Placement: 10-11 1 Credit

Criminal Investigation is a course that introduces students to the profession of criminal investigations. Students will understand basic functions of criminal investigations and procedures and will learn how to investigate or follow up during investigations. Students will learn terminology and investigative procedures related to criminal investigation, crime scene processing, evidence collection, fingerprinting, and courtroom presentation. Through case studies and simulated crime scenes, students will collect and analyze evidence such as fingerprint analysis, bodily fluids, hairs, fibers, shoe and tire impressions, bite marks, drugs, tool marks, firearms and ammunition, blood spatter, digital evidence, and other types of evidence.

Correctional Services Course #: 07229200
Recommended Grade Placement: 10-11 1 Credit

In Correctional Services, students prepare for certification required for employment as a correctional officer. The student will learn the role and responsibilities of a correctional officer; discuss relevant rules, regulations, and laws; and discuss defensive tactics, restraint techniques, and first aid procedures as used in the correctional setting. The student will analyze rehabilitation and alternatives to institutionalization. Students can pursue national certifications in CPR (Cardiopulmonary Resuscitation) and CERT (The Community Emergency Response Team) Program.

Forensic Science Course #: 07229300
Recommended Grade Placement: 11-12 1 Credit
Approved by the State Board of Education for 4th science credit | Prerequisite: Biology and Chemistry

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes.

Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

Forensic Psychology Course #: 07229260

Recommended Grade Placement: 10-11 1 Credit

Forensic psychology is found at the intersection between psychology and the criminal justice system. It involves understanding criminal law in the relevant jurisdictions in order to be able to interact within the criminal justice system. It utilizes and applies basic skills developed in psychology and criminal scenarios resulting in a structured and scientific approach to investigative analysis; thereby, enabling police and law enforcement officials to predict criminal activity via scientific analysis rather than intuition. Students will learn basic structured psychological investigative techniques in question building, interviewing, criminal behavior characteristics, truth detection methodology, research methods, statistical analysis and probability forecasting.

Practicum In Law, Public Safety, Corrections, and Security Course #: 07229025

Recommended Grade Placement: 12 2 Credits

Prerequisite: At least two credits in Law Enforcement Pathway

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 Law, Public Safety, Corrections, and Security Career Cluster. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Associates Degree in Criminal Justice

College Credit Opportunity – Tarrant County College

Crowley ISD offers dual credit courses in Criminal Justice to achieve an associate's degree. These courses are offered through Tarrant County College and tuition is waived. Students must be enrolled in Tarrant County College. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.

Legal Studies Program of Study

Law and Public Service Endorsement

The **Legal Studies** program of study introduces students to the occupations and educational opportunities related to representing clients in criminal and civil litigation and other legal proceedings, as well as assisting lawyers and preparing legal documents. This program of study explores possible specializations in a single area of law.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **LEGAL STUDIES** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Law, Public Safety, Correction & Security	❑ Practicum in Law, Public Safety, Corrections & Security
❑ Court Systems and Practices	❑ Advanced Legal Skills and Professions
❑ Political Science I	
❑ Business Law	

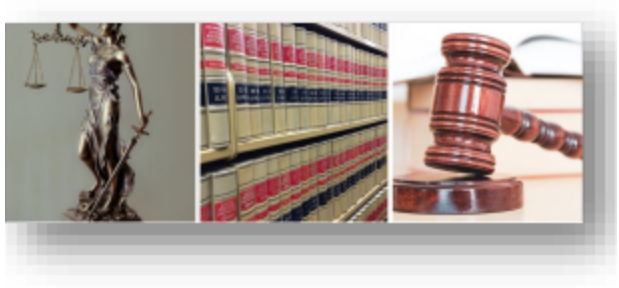
Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees
- Legal Assistant/Paralegal

Bachelor's Degrees
- Legal Assistant/Paralegal

Master's, Doctoral, and Professional Degrees
- Law
- Intellectual Property Law
- Advanced Legal Research/Studies General
- International Law and Legal Studies



Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Attend court hearings and other legal procedures • Join the Texas Public Service Association	• Intern with a local attorney • Script and conduct a mock trial

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Lawyers	$126,131	2,801	19%
Paralegal and Legal Assistants	$50,544	2,837	19%

Principles of Law, Public Safety, Corrections & Security Course #: 07099000
Recommended Grade Placement: 9 1 Credit

This course is designed to give students hands-on application in the Programs of Study of Law and Public Services. Topics include: Law Enforcement, Criminal Investigation, Court Systems, and Emergency Response.

Court Systems & Practices Course #: 07229210
Recommended Grade Placement: 10-11 1 Credit

Court Services is an overview of the federal and state court systems. The course identifies the roles of judicial officers and the trial processes from pretrial to sentencing and examines the types and rules of evidence. Emphasis is placed on constitutional laws for criminal procedures such as search and seizure, stop and frisk, and interrogation. Students can pursue national certifications in CPR (Cardiopulmonary Resuscitation) and CERT (The Community Emergency Response Team) Program.

Political Science I Course #: 07229700
Recommended Grade Placement: 10-11 1 Credit

This course will familiarize the student with political theory through the study of governments; public policies; and political processes, systems, and behavior.

Practicum in Law, Public Safety, Corrections & Security Course #: 07229025
Recommended Grade Placement 12 2 Credits
Prerequisite: At least two credits in Law Enforcement Pathway

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 Law, Public Safety, Corrections, and Security Career Cluster. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Advanced Legal Skills and Professions Course #: 07229150
Recommended Grade Placement: 11-12 1 Credit

This course provides students with a foundation to understand the basic mechanics of the U.S. legal system. Building on prior instruction in constitutional issues and the basics of American court systems, this course provides insight into the practical application of the law, as well as civil and criminal procedure, giving students a hands-on opportunity to experience a variety of legal professions.

Programs of Study in the SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH Pathway

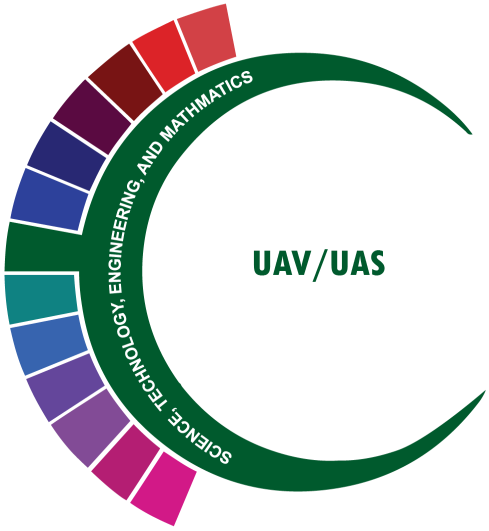
Biomedical Science

UAV / UAS

Cybersecurity

Engineering

Programming and Software Development



Unmanned Autonomous Systems and Vehicles (Formerly Aerial Robotics - Drones)

Program of Study

STEM Endorsement

The **Unmanned Autonomous Systems and Vehicles** program of study emphasizes the skills necessary to fly and program unmanned vehicles while also conducting field operations and repairs.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

NOTE: This program of study is part of the Crowley Academy of Aviation, Transportation and Logistics. For enrollment information, please visit the C-ATL website or the College Credit Opportunities section on page 16 of this guide.

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees
- Survey Technology/Surveying

Bachelor's Degrees
- Civil Engineering
- Geoscience

Master's, Doctoral, and Professional Degrees
- Civil Engineering
- Geoscience

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in SkillsUSA competitions	• Intern at a surveying firm

Industry-Based Certifications

- ESRI ArcGIS Desktop Entry

*IBC sunsetting 8/31/24

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Part 107 Remote Drone Pilot	Commercial Pilots	Airline Pilots, Copilots, and Flight Engineers		

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

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineering and Operations Technicians	$60,757	114	9%
Avionics Technicians	$59,114	170	9%
Airline Pilots, Copilots, and Flight Engineers	$165,130	1,150	9%
Commercial Pilots	$86,310	548	9%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Participate in SkillsUSA Explore virtual aviation websites	Seek part-time work at an airport, aviation services agency, or airline

Level I Certificate in UAV/UAS

College Credit Opportunity – Tarrant County College

Crowley ISD offers dual credit courses in UAV/UAS to achieve a Level One Certificate in UAV/UAS. These courses are offered through Tarrant County College and tuition is waived. Students must be enrolled in Tarrant County College. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.

Biomedical Science Program of Study

Public Service or STEM Endorsement

The **Biomedical Science** program of study focuses on the study of biology and medicine in order to introduce students to the knowledge and skill necessary to be successful in the healthcare field, such as researching and diagnosing diseases, pre-existing conditions, or other determinants of health. Students may also practice patient care and communication.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **BIOMEDICAL SCIENCE** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Principles of Biomedical Science	❑ Pathophysiology
❑ Human Body Systems	❑ Medical Interventions
	❑ Biomedical Innovation
	❑ Practicum of STEM

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees
- Histologic Technician
- Clinical Laboratory Science/Medical Technology/Technologist

Bachelor's Degrees
- Biomedical Engineers
- Clinical Laboratory Science/Medical Technology/Technologist

Master's, Doctoral, and Professional Degrees
- Genetic Counseling
- Medical Scientists
- Epidemiology

Industry-Based Certifications

- Biotechnician Assistant Credentialing Exam (BACE)
- Medical Laboratory Assistant
- Medical Laboratory Technician

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join Health Occupations Students of America	• Intern at a lab • Shadow a healthcare or medical professional

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Medical and Laboratory Technicians	$37,981	1,159	28%
Biological Technicians	$42,931	452	17%
Forensic Science Technicians	$48,152	171	35%
Chemical Technicians	$49,733	672	10%
Medical and Clinical Laboratory Technologists	$58,760	1,166	35%

Principles of Biomedical Science Course #: 07226004

Recommended Grade Placement: 9 1 Credit

Students explore concepts of Biology and Medicine to determine factors that led to the death of a fictional person. During the investigation, the students will examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. Students would be introduced to human physiology, basic biology, medicine, and research processes which will allow them to design their own experiments to solve problems. This course does not count as a science credit.

Human Body Systems Course #: 07226300

Recommended Grade Placement: 10-11 1 Credit

Students examine the interactions of human body systems as they explore identity, power, movement, protection and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Manikin; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases. This course does not count as a science credit.

Medical Interventions Course #: 07226320

Recommended Grade Placement: 11-12 1 Credit

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices and diagnostics. This course does not count as a science credit.

Biomedical Innovation Course #: 07226310

Recommended Grade Placement: 12 1 Credit

Students build on the knowledge and skills gained from the previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students apply their knowledge and skills to answer questions or solve problems in the biomedical sciences. This course does not count as a science credit.

Pathophysiology Course #: 07226400

Recommended Grade Placement: 11-12 1 Credit

Approved by the State Board of Education for 4th science credit | Prerequisite: Biology and Chemistry

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Students study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of diseases. Students will differentiate between normal and abnormal physiology. Should be taken with Medical Microbiology.

Practicum of STEM Course #: 07228920

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Algebra I and Geometry | Recommended Prerequisite: Two credits in STEM Pathway

This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Cybersecurity Program of Study

Business and Industry or STEM Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **CYBERSECURITY** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ AP Computer Science Principles	❑ Networking
❑ Foundations of Cybersecurity	❑ Cybersecurity Capstone
❑ Computer Maintenance	❑ Practicum of Information Technology

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

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

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

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

Work-Based Learning and Expanded Learning Opportunities

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

Industry-Based Certifications

- Cisco 200-201 CBROPS - Understanding Cisco Cybersecurity Operations Fundamentals
- CompTIA A+ Certification
- CompTIA Network+
- CompTIA Security+
- Cybersecurity Fundamentals
- CyberSecurity Fundamentals: An ISACA Certificate
- Oracle Certified Associate Java SE 8 Programmer

- Associate of (ISC)*

*IBC sunsetting 8/31/24

Aligned Occupations

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

AP Computer Science Principles Course #: 07222209

Recommended Grade Placement: 9-10 1 Credit

In this course, students will learn the principles that underlie the science of computing and develop the thinking skills that computer scientists use. Students will work on their own and as part of a team to creatively address real-world issues using the tools and processes of computation. ***AP courses receive weighted GPA credit.***

Foundations of Cybersecurity Course #: 07224830

Recommended Grade Placement: 9-10 1 Credit

In this course, students will develop the knowledge and skills needed to explore fundamental concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyber-attacks, threats, and vulnerabilities. Students will review and explore security policies designed to mitigate risks.

Computer Maintenance Course #: 07224520

Recommended Grade Placement: 9-10 1 Credit

Students acquire principles of computer maintenance, including electrical and electronic theory, computer hardware principles, and broad level components related to the installation, diagnosis, service, and repair of computer systems.

Networking Course #: 07224620

Recommended Grade Placement: 11-12 1 Credit

In Networking, students will develop knowledge of the concepts and skills related to data networking technologies and practices in order to apply them to personal or career development. To prepare for success, students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Cybersecurity Capstone Course #: 07224840

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Foundations of Cybersecurity

Students will develop the knowledge and skills needed to explore advanced concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyber-attacks, threats, and vulnerabilities, and students will develop security policies to mitigate risk. The skills obtained in this course will prepare students for additional study toward industry certification.

Practicum of Information Technology Course #: 07222240

Recommended Grade Placement: 12 2 Credits

Prerequisite: At least two credits of Cybersecurity courses

Research in IT is a project-based research course for students who have the ability to research a real-world technological problem. Students develop a project on a topic related to information technology career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, apply information technology concepts, 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, skills, and technologies in a variety of settings.

Engineering Program of Study

Business and Industry or STEM Endorsement

The **Engineering** program of study focuses on the design, development, and use of engines, machines, and structures. Students will learn how to apply science, mathematical methods, and empirical evidence to the innovation, design, construction, operation, and maintenance of different manufacturing systems.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **ENGINEERING** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Introduction to Engineering Design	❑ Aerospace Engineering
❑ Engineering Essentials *(middle school course only)*	❑ Digital Electronics
	❑ Engineering Science
	❑ Practicum in STEM

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees
- Electrical and Electronics Engineering
- Drafting and Design Technology/ Technician, General
- Engineering Technology

Bachelor's Degrees
- Electrical and Electronics Engineering
- CAD/CADD Drafting and/or Design Technology/ Technician
- Bioengineering and Biomedical Engineering
- Construction Engineering Technology/ Technician

Master's, Doctoral, and Professional Degrees
- Electrical and Electronics Engineering
- Mechanical Engineering
- Bioengineering and Biomedical Engineering

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Skills USA competitions	• Intern at an engineering firm • Shadow a machinist

Industry-Based Certifications

- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Fusion 360
- Autodesk Associate (Certified User) Inventor for Mechanical Design
- Autodesk Associate (Certified User) Revit Architecture
- Autodesk Associate (Certified User) Revit for Electrical
- Autodesk Associate (Certified User) Revit for Structural Design
- Autodesk Certified Professional Fusion 360
- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional in Civil 3D for Infrastructure Design
- Autodesk Certified Professional in Inventor for Mechanical Design
- Autodesk Certified Professional in Revit for Architectural Design
- Autodesk Certified Professional in Revit for Electrical Design
- Autodesk Certified Professional in Revit for Structural Design
- C-103 Certified Industry 4.0 Associate - Robot System Operations
- Engineering Technology Foundations
- Lean Six Sigma Green Belt Certification
- Pre-Engineering/Engineering Technology - Job Ready

- Certified SOLIDWORKS Associate*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineers	$110,843	481	9%
Industrial Engineers	$97,074	1,263	10%
Mechanical Engineers	$91,107	1,535	11%
Chemical Engineers	$112,819	474	9%
Electrical Engineers	$98,405	1,137	105

Introduction to Engineering Design (IED) – Project Lead The Way Course #: 07228000
Recommended Grade Placement: 9-10 1 Credit

Designed for 9th or 10th grade students and serves as the foundation for all PLTW courses, the major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling design software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community. Students will have an opportunity to test for college credit through UT Tyler. The college course credit is for Engineering 1201: Introduction to Engineering. PLTW courses may count for college credit and will receive additional weight using the Dual Credit scale for the weighted GPA.

Engineering Science (formerly Principles Of Engineering) Course #: 07228120
Recommended Grade Placement: 10-11 1 Credit
Prerequisite: Algebra I and Biology, Chemistry, Integrated Physics and Chemistry (IPC), or Physics | Recommended prerequisite: Geometry

This survey course of engineering exposes students to major concepts they'll encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community. PLTW courses may count for college credit and will receive additional weight using the Dual Credit scale for the weighted GPA.

Aerospace Engineering (AE) - Project Lead The Way Course #: 07228210
Recommended Grade Placement: 11-12 1 Credit

Aerospace Engineering engages students in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, structures and materials, and systems engineering. Using 3-D design software, students work in teams utilizing hands-on activities, projects and problems and are exposed to various situations encountered by aerospace engineers. This course is designed for 11th or 12th grade students. PLTW courses may count for college credit and will receive additional weight using the Dual Credit scale for the weighted GPA.

Digital Electronics (DE) - Project Lead The Way Course #: 07228150

Recommended Grade Placement: 11-12 1 Credit

Prerequisite: Algebra I and Geometry

Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras and high-definition televisions. The major focus of the DE course is to expose students to the process of combinational and sequential logic design, teamwork, communication methods, engineering standards and technical documentation. This course is designed for 10th or 11th grade students. PLTW courses may count for college credit and will receive additional weight using the Dual Credit scale for the weighted GPA.

Practicum of STEM Course #: 07228920

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Algebra I and Geometry | Recommended Prerequisite: Two credits in STEM Pathway

This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Programming and Software Development Program of Study

Business and Industry or STEM Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

There are two pathways in Programming and Software development — one for those who plan to major in computer science in college and one for those who plan on a career in programming after high school.

Courses in the **PROGRAMMING AND SOFTWARE DEVELOPMENT FOR COMPUTER SCIENCE MAJORS** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Computer Science I	❑ Computer Science II ❑ Computer Science III ❑ Computer Science - Advanced Placement

Courses in the **PROGRAMMING AND SOFTWARE DEVELOPMENT FOR CAREER PROGRAMMING** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❏ Computer Science I	❏ Computer Science II
❏ Game Programming and Design	❏ Practicum of STEM

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

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

Bachelor's Degrees

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

Master's, Doctoral, and Professional Degrees

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

Industry-Based Certifications

- C++ Certified Associate Programmer
- Certified Entry-Level Python Programmer (PCEP)
- Certified Professional Programmer
- CompTIA Linux+
- Oracle Certified Associate Java SE 8 Programmer
- Oracle Database SQL Certified Associate

Work-Based Learning and Expanded Learning Opportunities

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

Aligned Occupations

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

Computer Science I Course #: 07222205

Recommended Grade Placement: 9-12 1 Credit

Prerequisite: Algebra I

Students will access, analyze, and evaluate all types of information in ways that are computable in order to solve problems that range in scope from computing a speeding ticket to instructing a robot to dance, from designing interactive, intelligent fashion garments to creating a mobile app game. Students are exposed to the vast and diverse world of computer science, working collaboratively and individually on projects and learning a variety of programming languages, both graphical and text-based, to use in implementing their solutions. This is the first in the sequence of computer science courses offered for students in the computer science program of study, STEM endorsement. This is an advanced academic course and is weighted in the GPA. ***This course receives weighted GPA credit.***

Computer Science - Advanced Placement Course #: 07222206

Recommended Grade Placement: 9-12 1 Credit

Approved by State Board of Education for math credit | Prerequisite: Algebra I

This course is a college-level course equivalent of a first semester computer science course in college. Students will learn and apply computer science concepts to write computer programs in the Java programming language and to prepare for the AP Computer Science A exam in May. Students should be comfortable with algebraic functions and concepts including the use of functional notation such as f(x) = x + 2 and f (x) = g(h(x)), should be successful working independently, be prepared to spend 3-5 hours per week outside of the classroom working on programming assignments and accept the challenge of preparing for an AP exam. This is the second in the sequence of computer science courses offered for students in the computer science program of study, STEM endorsement. This is an advanced academic course and is weighted in the GPA. Students enrolling in Advanced Placement courses will be required to take the Advanced Placement or Mock AP exams for each course in order to receive credit. ***This course receives weighted credit for GPA calculation.***

Computer Science II Course #: 07222220

Recommended Grade Placement: 10-12 1 Credit

Prerequisite: Computer Science I and Algebra I

This is the second in the sequence of computer science courses offered. Students will continue their learning of more advanced computer science concepts including object-oriented programming in the Java programming language. Students will learn much of the same information as contained in AP Computer Science A but without preparing for the AP exam. This is the second in the sequence of computer science courses offered for students in the computer science program of study, STEM endorsement. ***This course receives weighted credit for GPA calculation.***

Computer Science III Course #: 07222230

Recommended Grade Placement: 10-12 1 Credit

Prerequisite: Computer Science II or AP Computer Science

This is the third in the sequence of computer science courses offered. Students will learn additional data structures for storing and retrieving data including Sets, Maps, Lists, Stacks, Queues and Trees, and explore the advantages/disadvantages of each. Students will explore how technology impacts our lives by exploring current computer science topics such as artificial intelligence, cybersecurity and nanotechnology. In addition, students will choose computing topics of interest to research. This is the third in the sequence of computer science courses offered for students in the computer science program of study, STEM endorsement. ***This course receives weighted credit for GPA calculation.***

Game Programming And Design Course #: 07224940

Recommended Grade Placement: 10-12 1 Credit

Prerequisite: Algebra I

Game Programming and Design will foster student creativity and innovation by presenting students with opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve gaming problems. Through data analysis, students will include the identification of task requirements, plan search strategies, and use programming concepts to access, analyze, and evaluate information needed to design games. By acquiring programming knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will create a computer game that is presented to an evaluation panel.

Practicum of STEM Course #: 07228920

Recommended Grade Placement: 11-12 2 Credits

Prerequisite: Algebra I and Geometry | Recommended Prerequisite: Two credits in Programming and Software Program of Study

This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Computer Programming AAS

College Credit Opportunity – Tarrant County College

Crowley ISD offers an Associates Degree Program in Computer Programming. These courses are offered through Tarrant County College and tuition is waived. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more *information.*

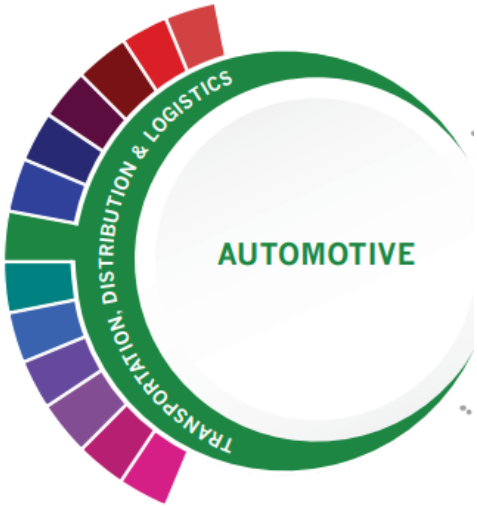
Programs of Study in the TRANSPORTATION, DISTRIBUTION, AND LOGISTICS Pathway

Automotive

Aviation Flight

Aviation Maintenance

Distribution and Logistics



Automotive Program of Study

Business and Industry Endorsement

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

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

NOTE: This program of study is part of the Crowley Academy of Aviation, Transportation and Logistics. For enrollment information, please visit the C-ATL website or the College Credit Opportunities section on page 16 of this guide.

Courses in the **AUTOMOTIVE** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Small Engine Technology I	❑ Automotive Technology I *(must be taken concurrently with Automotive Basics)*
❑ Automotive Basics *(must be taken concurrently with Automotive Technology I)*	❑ Automotive Technology II *(must be taken concurrently with Advanced Transportation Systems Laboratory)*
	❑ Advanced Transportation Systems Laboratory *(must be taken concurrently with Automotive Technology II)*

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

- Autobody/ Collision and Repair Technology/ Technician
- Medium/Heavy Vehicle and Truck Technology/ Technician
- Mechanical Engineering/ Mechanical Technology/ Technician

Bachelor's Degrees

- Mechanical Engineering/ Mechanical Technology/ Technician

Master's, Doctoral, and Professional Degrees

- Mechanical Engineering

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join SkillsUSA or the Automotive Service Association	• Work at a local automotive repair or body shop

Industry-Based Certifications

- ASE Entry Level Automobile Maintenance and Light Repair (MR)
- ASE Entry-Level Automobile Automatic Transmission/Transaxle (AT)
- ASE Entry-Level Automobile Brakes (BR)
- ASE Entry-Level Automobile Electronic/Electrical Systems (EE)
- ASE Entry-Level Automobile Engine Performance (EP)
- ASE Entry-Level Automobile Engine Repair (ER)
- ASE Entry-Level Automobile Heating and Air Conditioning (AC)
- ASE Entry-Level Automobile Manual Drive Train and Axles (MD)
- ASE Entry-Level Automobile Service Technology
- ASE Entry-Level Automobile Suspension and Steering (SS)
- ASE Entry-Level Collision Mechanical and Electrical Components (ME)
- ASE Entry-Level Collision Non-Structural Analysis and Damage Repair (SR)
- ASE Entry-Level Collision Painting and Refinishing (PR)
- ASE Entry-Level Collision Structural Analysis and Damage Repair
- ASE Refrigerant Recovery and Recycling
- Principles of Small Engine Technology Certification
- Small Engine Technology
- OSHA 30 Hour General*
- ASE Suspension and Steering*
- ASE Structural Analysis Damage Repair*
- ASE Painting & Refinishing*
- ASE Non-Structural Analysis Damage Repair*
- ASE Mech Elec Components*
- ASE Manual Drive Train Axles*
- ASE Maintenance Light Repair*
- ASE Heating, Ventilation, AC (HVAC)*
- ASE Auto Transmission*
- ASE Automobile Service Technology*
- ASE Brakes*
- ASE Electrical/Electronic Systems*
- ASE Engine Performance*
- ASE Engine Repair*

*IBC sunsetting 8/31/24

Aligned Occupations

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

Small Engine Technology I Course #: 07229615

Recommended Grade Placement: 9-10 1 Credit

Small Engine Technology I includes knowledge of the function and maintenance of the systems and components of all types of small engines such as outdoor power equipment, motorcycles, generators, and irrigation engines. This course is designed to provide training for employment in the small engine technology industry. Instruction includes the repair and service of cooling, air, fuel, lubricating, electrical, ignition, and mechanical systems. In addition, the student will receive instruction in safety, academic, and leadership skills as well as career opportunities.

Automotive Basics Course #: 07220135

Recommended Grade Placement: 11 1 Credit

NOTE: This course must be taken concurrently with Automotive Technology I

Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Automotive Technology I: Maintenance and Light Repair Course #: 07229600

Recommended Grade Placement: 11 2 Credits

Recommended Prerequisite: Small Engine Technology I | NOTE: This course must be taken concurrently with Automotive Basics

Automotive Technology I: Maintenance and Light Repair includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. This course includes applicable safety and environmental rules and regulations. Students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Automotive Technology II: Automotive Service Course #: 07229601

Recommended Grade Placement: 12 2 Credits

Prerequisite: Automotive Technology I: Automotive Basics | NOTE: This course must be taken concurrently with Advanced Transportation Systems Laboratory

Automotive Technology II: Automotive Service includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. Automotive Technology II: Automotive Service includes applicable safety and environmental rules and regulations. In this course, students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Advanced Transportation Systems Laboratory Course #: 07229601

Recommended Grade Placement: 12 1 Credit

Prerequisite: Automotive Technology I: Automotive Basics | NOTE: This course must be taken concurrently with Advanced Transportation Systems Laboratory

This course provides an enhancement opportunity for students to develop the additional skills necessary to pursue industry certification in Automotive Technology. It is a concurrently scheduled course with Automotive Technology II.

Engine Analysis Technician Certification

College Credit Opportunity – Tarrant County College

Crowley ISD offers dual credit courses in Automotive Technology. These courses are offered through Tarrant County College and tuition is waived Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more *information.*

Aviation Flight Program of Study

Business and Industry Endorsement

The **Aviation Flight** regional program of study introduces CTE learners to the occupations and education opportunities related to understanding the principles and science of flight, aviation engineering, air navigational aids, air traffic controls, and communications equipment to ensure conformance with federal safety regulations.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Courses in the **AVIATION FLIGHT** Program of Study

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry-Level Courses	*Advanced Courses*
❑ Introduction to Aerospace & Aviation	❑ Aerospace Engineering
❑ Introduction to Unmanned Aerial Vehicle (UAV) Flight	❑ Aviation Ground School
	❑ Practicum in Transportation Systems

Postsecondary Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

- Airline Pilots, Copilots, and Flight Engineers

Industry-Based Certifications

- FAA Part 107 Remote Drone Pilot

- Certified Aerospace Technician*
- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in SkillsUSA • Explore virtual aviation websites	• Work in an aviation apprenticeship or internship • Work for a drone company

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineering and Operations Technicians	$60,757	114	9%
Airline Pilots, Copilots, and Flight Engineers	$165,130	1,150	9%
Commercial Pilots	$86,310	548	9%

Introduction to Aerospace & Aviation Course #: 07229860

Recommended Grade Placement: 9-10 1 Credit

The Introduction to Aerospace and Aviation course will provide the foundation for advanced exploration in the areas of professional pilot, aerospace engineering, and unmanned aircraft systems. Students will learn about the history of aviation, from Leonardo da Vinci's ideas about flight to the Wright brothers and the space race. Along the way students will learn about the innovations and technological developments that have made today's aviation and aerospace industries possible. The course includes engineering practices, the design process, aircraft structure, space vehicles past and present, and a look toward future space exploration.

Introduction to Unmanned Aerial Vehicle (UAV) Flight Course #: 07229850

Recommended Grade Placement: 9-11 1 Credit

The Introduction to Unmanned Aerial Vehicle (UAV) Flight course is designed to prepare students for entry-level employment or continuing education in piloting UAV operations. Principles of UAV is designed to instruct students in UAV flight navigation, industry laws and regulations, and safety regulations. Students are also exposed to mission planning procedures, environmental factors, and human factors involved in the UAV industry.

Aerospace Engineering (AE) - Project Lead The Way Course #: 07228210

Recommended Grade Placement: 11-12 1 Credit

Aerospace Engineering engages students in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, structures and materials, and systems engineering. Using 3-D design software, students work in teams utilizing hands-on activities, projects and problems and are exposed to various situations encountered by aerospace engineers. This course is designed for 11th or 12th grade students. PLTW courses may count for college credit and will receive additional weight using the Dual Credit scale for the weighted GPA.

Aviation Ground School Course #: 07229870

Recommended Grade Placement: 11-12 1 Credit

This course is designed to extend student interests in all aspects of aviation while preparing students to take the formal ground requisite exam for the Federal Aviation Administration (FAA) FAA Airman Knowledge Test which is required to obtain a private pilot's license. The rigor of the course challenges students with complex aeronautical, engineering, weather, management and judgment concepts. Rules, regulations, obligations, and commitments to discipline and focus are foundational throughout the course. The ability to grasp flight without actually flying a real aircraft extends well beyond the classroom as students learn navigation, weather science, attention to detail (mathematical fuel and load planning), health and mental well-being related to flight planning and piloting aircraft.

Practicum in Transportation Systems Course #: 07229835

Recommended Grade Placement: 11-12 2 Credits

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 Aviation Flight program of study. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Aviation Maintenance
Program of Study

Business and Industry Endorsement

The **Aviation Maintenance** program of study introduces students to the occupations and education opportunities related to inspecting aircraft, maintenance procedures, air navigational aids, air traffic controls, and communications equipment to ensure conformance with federal safety regulations.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

NOTE: This program of study is part of the Crowley Academy of Aviation, Transportation and Logistics. For enrollment information, please visit the C-ATL website or the College Credit Opportunities section on page 16 of this guide.

Options, Occupations & Additional Learning Opportunities

Postsecondary Opportunities

Associates Degrees

- Avionics Maintenance Technology/Technician
- Aircraft Powerplant Technology/ Technician
- Airframe Mechanics and Aircraft Maintenance Technology/Technician

Bachelor's Degrees

- Airframe Mechanics and Aircraft Maintenance Technology/Technician

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in SkillsUSA • Explore virtual aviation websites	• Seek part-time work at an airport, aviation services agency, or airline

Industry-Based Certifications

- Aerospace Manufacturing Certification

- OSHA 30 Hour General*
- Certified Aerospace Technician*
- FAA Aviation Maintenance Technician Airframe*
- FAA Aviation Maintenance Technician General*
- ISCET Certified Electronics Technicians*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Aircraft Mechanics and Technicians	$58,698	1,469	9%
Avionics Technicians	$59,114	170	9%

Level II Certificate in Aviation Maintenance in Powerplant

College Credit Opportunity – Tarrant County College

Crowley ISD offers dual credit courses to achieve a Level One Certificate in Aviation Maintenance. These courses are offered through Tarrant County College and tuition is waived. Students must be enrolled in Tarrant County College. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.

Distribution and Logistics
Program of Study
Business and Industry Endorsement

The **Distribution and Logistics** program of study teaches students how to plan, coordinate, and direct people and operational plans related to distributed goods and services. Students will learn how to manage daily operations and logistics personnel.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

NOTE: This program of study is part of the Crowley Academy of Aviation, Transportation and Logistics. For enrollment information, please visit the C-ATL website or the College Credit Opportunities section on page 16 of this guide.

Postsecondary Options, Occupations and Additional Learning Opportunities

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
MSSC Certified Logistics Technicians	Emergency Number Professional	Business Administration and Management, General		
	SAP Certified Application Associate - Logistics Execution and Warehouse Management	Operations Management and Supervision		
	Certified Billing and Coding Specialist	General Office Occupations and Clerical Services	Business/ Commerce, General	Public Administration
	Cargo Shipper's Agent	Business Administration and Management, General		
Additional industry based certification information is available from the TEA CTE website.				
For more information on postsecondary options for this program of study, visit TXCTE.org.				

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Logisticians	$77,210	1,550	13%
Supply Chain Managers	$113,110	1,794	26%
Transportation, Storage, and Distribution Managers	$89,045	965	31%
Purchasing Managers	$121,722	497	14%
Purchasing Agents, Except Wholesale, Retail, and Farm Products	$64,293	2,727	9%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: SkillsUSA, FBA, FBLA, or Technology Student Association

Work Based Learning Activities: Intern at a distribution or warehousing center.

Associates Degree in Logistics and Supply Chain Management

Level I Certificate in Warehouse Management could be completed in the first two years of coursework.

College Credit Opportunity – Tarrant County College

Crowley ISD offers dual credit courses to achieve an associate's degree in Logistics and Supply Chain Management. These courses are offered through Tarrant County College and tuition is waived. Students must be enrolled in Tarrant County College. Please refer to the College Credit section of this guide or visit https://www.crowleyisdtx.org/Domain/1009 for more information.