Gregory-Portland High School

Course Catalog

2024 - 2025

It is the policy of the Gregory-Portland Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in its programs and services.

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Es norma de Distrito Escolar Independiente de Gregory-Portland no discriminar por motives de raza, color, origen nacional, sexo o impendimento, en sus programas y servicios.

Procedures and policies within this guide are based on a standard school year and may need to be altered due to outside circumstances.

Gregory-Portland Independent School District

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Gregory-Portland High School Counselors

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Carrie Flores, Counselor
Eileen Harley, Counselor
Catherine Teel, College and Career Readiness Counselor

Gregory-Portland High School

Motto:

Challenging the leaders of tomorrow!

High School Mission:

The mission of G-PISD is to educate, inspire, and empower our students to succeed in life and become the next generation of leaders.

Intent of this guide:

The provisions and information set forth in this Course Description Guide are intended to be informational and not contractual in nature. The District hereby reserves and retains the right to amend, alter, change, delete, or modify any of the provisions of this guide at any time, from time to time, in any manner that the Administration or the Board of Trustees of the District deems to be in the best interest of the students of this District. The contents of this guide apply to all students and programs in the District and do not amend, abridge, or replace Board policies or administrative regulations established by the District.

Gregory-Portland ISD offers you many ways to prepare for a productive adult life. The district's high school provides a wide range of programs that prepare students for post-high school experiences: college, technical school, military service, full- time employment, and other areas. Included in this guide are not only the graduation requirements for each program, but also samples of graduation plans to determine which courses you can take for a variety of career plans. The Endorsement Area of Study section of this guide explains future career options in terms of interest areas and suggests courses and activities that will help you arrive at your goal in life. After the Endorsement Area of Study section, all G-PISD courses are listed and described with information about prerequisites and grade level placement. By planning wisely and following through on preparation, you can create a future in which you will be successful.

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Gregory-Portland High School Graduation Requirements

SUBJECT AND ASSESSMENT	FOUNDATION WITH ENDORSEMENT PROGRAM	DISTINGUISHED LEVEL OF ACHIEVEMENT
ENGLISH *English I EOC* *English II EOC*	**4 Credits** English I English II English III English IV or Approved Substitution	**4 Credits** English I English II English III English IV or Approved Substitution
MATHEMATICS *Algebra I EOC*	**4 Credits** Algebra I Geometry 2 Advanced Math Courses	**4 Credits** Algebra I Geometry Algebra II 1 Advanced Math Course
SCIENCE *Biology EOC*	**4 Credits** Biology IPC, Chemistry, or Physics 2 Additional Science Courses	**4 Credits** Biology IPC or Advanced Science Course 2 Additional Science Courses
SOCIAL STUDIES *US History EOC*	**3 Credits** World Geography or World History U.S. History U.S. Government / Economics or Economics & Personal Financial Literacy	**3 Credits** World History or World Geography U.S. History U.S. Government / Economics or Economics & Personal Financial Literacy
PHYSICAL EDUCATION	**1 Credit**	**1 Credit**
FINE ARTS	**1 Credit**	**1 Credit**
LANGUAGES OTHER THAN ENGLISH	**2 Credits** (any two levels in the same language) or **2 Credits** from Computer Science Courses	**2 Credits** (any two levels in the same language) or **2 Credits** from Computer Science Courses
ELECTIVES	**7 Credits** – as necessary to fulfill a required endorsement	**7 Credits** – as necessary to fulfill a required endorsement
ADDITIONAL REQUIREMENTS FOR GRADUATION	• Demonstrate proficiency in speech via ELA Course. • Demonstrate proficiency in interaction with peace officers. • Demonstrate proficiency in hands-on CPR. • Completion of FAFSA/TAFSA or Opt-Out Form. • Successful completion of an endorsement in your area of interest.	• Demonstrate proficiency in speech via ELA Course. • Demonstrate proficiency in interaction with peace officers. • Demonstrate proficiency in hands-on CPR. • Completion of FAFSA/TAFSA or Opt-Out Form. • Successful completion of an endorsement in your area of interest.
TOTAL	**26 CREDITS**	**26 CREDITS**

Distinguished Level of Achievement: 26 Credits
To earn a distinguished level of achievement, a student must successfully complete the curriculum requirements for at least one endorsement, including four credits in science and four credits in mathematics, to include Algebra II.

Graduation Endorsement Options

Students may earn one or more endorsements as part of their high school diploma. An endorsement consists of a sequence of courses that are grouped together by interest or occupational skill. They provide students with in-depth knowledge of a subject area or a high-wage, high-skill, and in-demand occupation.

Arts and Humanities Endorsement Options

Program of Study or Academic Pathways Available:

- Social Studies Pathway (5 Credits)
- Language Pathway (4 Credits of one Language or 2 Credits from different languages)
- Computer Science Pathway (2 or more credits)
- Fine Arts Pathway (4 Credits)
- English Elective or Journalism Pathway (4 Credits)

Business and Industry Endorsement Options

Program of Study or Academic Pathways Available:

- Career and Technical Education (CTE) courses that consists of at least 2 courses in the same Program of Study and at least one Advanced CTE course.
- English electives to include debate, advanced newspaper, and advanced yearbook (4 Credits)
- A combination of credits from the categories listed above

Public Services Endorsement Options

Program of Study or Academic Pathways Available:

- Career and Technical Education (CTE) courses that consist of at least 2 courses in the same Program of Study and at least one Advanced CTE course.
- JROTC (4 Credits)

STEM Endorsement Options

Program of Study or Academic Pathways Available:

- Career and Technical Education (CTE) courses that consist of at least 2 courses in the same Program of Study and at least one Advanced CTE course.
- Mathematics (3 Credits including Algebra II and 2 math advanced courses in which Algebra II is a prerequisite)
- Science (4 Credits including chemistry, physics and 2 additional advanced science courses)
- Computer Science Program of Study
- A combination of no more than two of the categories listed above

Multidisciplinary Studies Endorsement Options

Program of Study or Academic Pathways Available:

- 4 advanced courses that prepare a student to enter the workforce successfully or postsecondary education without remediation from within one endorsement area or among endorsement areas that are not in a coherent sequence
- 4 credits in each of the four foundation subject areas to include English IV and chemistry and/or physics
- 4 credits in AP or dual credit selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts

Automatic Admission to College/Universities:

Only students meeting the Distinguished Level of Achievement, requiring Algebra II and at least one endorsement, are eligible for the top 10% Automatic Admissions to state Colleges and Universities.

*This rule has been modified for UT in Austin, see UT Austin Admissions page. Performance Acknowledgments (not related to Distinguished Level of Achievement): Outstanding performance in Dual Credit, on an AP exam, the PSAT, SAT, OR ACT; Bilingualism and Biliteracy; OR Earning a Nationally or Internationally recognized Business or Industry Certificate or License.

Graduation Ceremony:

There will be a formal graduation ceremony held in May. A fall graduate or a three-year graduate may participate in May graduation ceremonies. An early graduate must notify the principal on or before March 1st of the spring semester of his/her intent to participate.

Graduation Through Acceleration (Three-year Graduates):

It is strongly recommended that students who wish to graduate through acceleration apply as early as possible in their high school career to facilitate appropriate planning. Therefore, students should apply no later than the *end of the first nine weeks of their junior year with their counselor*. Students must request an application from their counselor and receive approval.

Graduation through acceleration may be accomplished by following district policy and completing graduation requirements through:

a. normal academic-year coursework,
b. credit by Exam without prior instruction (see School Board Policy EEJB and Student-Parent Handbook),
c. summer school courses, and/or
d. correspondence courses.

Students will receive credit on transcripts for courses taken through these methods. Grades achieved will not be utilized to calculate the student's GPA or class rank. Weighted or Dual Credit courses taken during the summer do not count in class rank or to calculate GPA. Please see your counselor regarding the early graduate scholarship. A student who has applied for early graduation may reverse that decision with written parent permission and principal approval.

Special Education Graduation Options

Standard of Performance	State Assessments	Graduation Options for Students Receiving Special Education Services	Eligibility for Special Education Services
Students satisfactorily complete credit requirements for graduation at the standard applicable to students in general education.	STAAR Satisfactory Performance	Option: I Foundation High School Plan + 1 or more endorsements + Distinguished Level of Achievement + Performance Acknowledgements	Special Education services shall terminate upon graduation
Students satisfactorily complete credit requirements for graduation at the standard applicable to students in general education.	STAAR Participation Required ARD/IEP Committee determines if passing is required.	Option: II Foundation High School Plan Course planning, including courses in endorsement areas, should be based on postsecondary goals and student strengths and interests.	
Students satisfactorily complete credit requirements through courses, one or more of which contain modified curriculum. Student must also successfully complete the student's IEP and meet one of four conditions: (a) full-time employment plus self-help skills to maintain employment without need for support from local school district; (b) employability and self-help skills without need for direct ongoing support of local school district; (c) access to services outside of the responsibility of local school district; or (d) no longer meets age eligibility.	STAAR Participation required ARD/IEP Committee determines if passing is required.	Option: II a, b, c, d Foundation High School Plan + 1 or more endorsements if student meets eligibility criteria*	ARD/IEP Committee shall determine needed educational services after completion of credit requirements as long as the student meets age eligibility requirements and is not older than 21 on September 1st.
Students satisfactorily complete credit requirements through courses, one or more of which contain modified curriculum. Student must also successfully complete the student's IEP and meet one of four conditions: (a) full-time employment plus self-help skills to maintain employment without need for support from local school district; (b) employability and self-help skills without need for direct ongoing support of local school district; (c) access to services outside of the responsibility of local school district; or (d) no longer meets age eligibility.	STAAR Alternate II	Option: II a, b, c, d Foundation High School Plan + 1 or more endorsements if student meets eligibility criteria* Course planning, including courses in endorsement areas, should be based on postsecondary goals and student strengths & interests.	

Preparing for High School Graduation

Freshman Year

- Review your schedule to make sure you are enrolled in challenging and rigorous classes. A wide variety of advanced courses are available to you.
- Start thinking about your career goals and talk to people in that field – ask lots of questions!
- GET INVOLVED in extracurricular activities and begin to make a resume of your activities. This will be of great use for you when starting to apply for college admissions as well as jobs.
- Attend college fairs and ask lots of questions about admissions, majors, financial aid, programs, etc.
- WORK HARD on your academics, grade point average, homework, and semester exams.
- Develop good work habits for homework and time management skills.
- Take the PSAT in October, you can register for the PSAT in the counseling office in September. Be ready to do your best as the PSAT scores are not only a predictor of how well you will do on the actual SAT but also it is used as a measure of College Readiness!
- Meet with your counselor to discuss your college plans and course schedule and endorsements

Sophomore Year

- Meet with your counselor to discuss your college plans, course schedule and endorsements. Review your schedule to make sure you are enrolled in challenging and rigorous classes.
- Start a calendar of important dates and deadlines.
- Get more involved in extracurricular activities and begin to make a resume of your activities.
- Attend college fairs. Ask lots of questions about majors, financial aid, support /resources available, etc.
- TAKE THE PSAT in October you can register for the PSAT in the counseling office in September. (You will retake the PSAT one more time in the fall of your junior year).
- Revise and update your 4 YEAR PLAN and make sure you are completing needed classes to earn your endorsement.

Junior Year

- Meet with your counselor to discuss your college plans, course schedule and endorsements. Review your schedule to make sure you are enrolled in challenging and rigorous classes.
- Start a calendar of important dates and deadlines, such as SAT/ACT/PSAT.
- Get more involved in extracurricular activities and begin to make a resume of your activities.
- Attend college fairs. Ask lots of questions about majors, financial aid, support /resources available, etc.
- TAKE THE PSAT in October you can register for the PSAT in the counseling office in September.
- Revise and update your 4 YEAR PLAN and make sure you are completing needed classes to earn your endorsement.
- Prepare for the free school day SAT given in March. You can also register for ACT tests (optional). Practice SAT and ACT questions on-line at www.number2.com. Other free websites that offer SAT/ACT Prep online are www.sat.collegeboard.org, ACT www.actstudent.org, or https://www.khanacademy.org/test-prep/sats. Sign up for the SAT question of the day at www.collegeboard.org.
- Research colleges and universities. Try to visit colleges and have a solid list of your top four choices by the summer of your senior year. Good websites for college searches are: www.collegeforalltexans.com, https://bigfuture.collegeboard.org, www.actstudent.org.

Senior Year

- Meet with your counselor to discuss your college plans, course schedule and endorsements. Review your schedule to make sure you are enrolled in challenging and rigorous classes.
- Start a calendar of important dates and deadlines, such as SAT/ACT/College Admission deadlines.
- Get more involved in extracurricular activities and begin to make a resume of your activities.
- Attend college fairs. Ask lots of questions about majors, financial aid, support /resources available, etc.
- Revise and update your 4 YEAR PLAN and make sure you are completing needed classes to earn your endorsement.
- SAT/ACT tests are still available, if you need further testing. Practice SAT and ACT questions on-line at www.number2.com. Other free websites that offer SAT/ACT Prep online are www.sat.collegeboard.org, ACT www.actstudent.org, or https://www.khanacademy.org/test-prep/sats. Sign up for the SAT question of the day at www.collegeboard.org.
- Research colleges and universities. Try to visit colleges and have a solid list of your top four choices by the summer of your senior year. Good websites for college searches are: www.collegeforalltexans.com, https://bigfuture.collegeboard.org, www.actstudent.org.
- Apply to colleges early before the deadlines: for most colleges in Texas apply through www.applytexas.org, private and/or out of state colleges through www.commonapp.org. Some Application Deadlines: Oct 15, Nov 15, or Dec 1 – Priority deadlines for many TX colleges/universities (Visit each college website, as it is all dependent on what program you are seeking, etc.)
- Complete your FAFSA/TAFSA by January 15 (priority deadline). FAFSA does not open until October 1st of your senior year. www.studentaid.gov

District and Campus Information

Weighted Courses

Level 2 Weighted Courses (GPA Multiplier of 1.1)			
Algebra 1 Pre AP	Chemistry Pre AP	Geometry Pre AP	Spanish 3 Advanced
Algebra II Advanced	English 1 Pre AP	Precalculus Advanced	World Geography Advanced
Biology Pre AP	English 2 Pre AP	Spanish 2 Advanced	World History Pre AP

Level 3 Weighted Courses (GPA Multiplier of 1.15)		
Health Science 1 Continuing Education	Medical Terminology Continuing Education	Practicum of Health Science Continuing Education

Level 4 Weighted Courses (GPA Multiplier of 1.2)			
Art DC	Concepts of Engineering	Macroeconomics DC	Sociology DC
Art and Design AP	Cosmetology I / II	Medical Terminology DC	Spanish Literature & Culture AP
Auto Tech I	Cosmetology III	Music Appreciation DC	Speech DC (COMG 1391)
Auto Tech II	Digital Media DC	Petrochemical Safety Health & Environment	Statistics AP
BCIS DC	Elementary Statistics DC	Philosophy DC	Texas Government DC
Biology AP	English Language & Composition AP	Physics 1 AP	Trigonometry DC
Biology DC	English Literature & Composition AP	Physics 2: Algebra-Based AP	US Government AP
Calculus AB AP	English 4 DC	Physics C: Electricity & Magnetism AP	US Government DC
Calculus BC AP	Environmental Science AP	Physics C: Mechanics AP	US History AP
Calculus DC	Human Anatomy & Physiology DC	Practicum in Manufacturing	US History DC
Chemistry AP	Industrial Math Dual Credit (TECM 1301)	Principles of Law DC	Welding I DC
College Algebra DC	Introduction to Process Technology	Professional Communications DC	Welding II DC
Film Appreciation DC	Macroeconomics AP	Psychology DC	World History AP

UIL Eligibility

Academic Requirements for No Pass / No Play: Any course that has an additional weight in GPA calculation will be included in the No Pass/No Play Exemption List.

UIL participants are eligible to participate in contests during the first six weeks of the school year provided the following standards have been met:

- Students beginning grades nine and below must have been **promoted** from the previous grade prior to the beginning of the current school year.
- High school students transferring from out-of-state may be eligible the first six weeks of school if they meet the criteria cited above or school officials are able to determine that they would have been eligible if they had remained in the out-of-state school from which they are transferring.
- Students who are not in compliance with these provisions may request a hardship appeal of
- their academic eligibility through the UIL state office. Local school boards may elect to adopt these standards for all activities to avoid having different standards for student participants (e.g., football, drill team, cheerleading, and all other extracurricular activities as defined by Commissioner of Education rule [19 TAC Chapter §76]).

Eligibility for All Extracurricular Participants After First Six Weeks of the School Year

A student who receives, at the end of any grading period (after the first six weeks of the school year), a grade below 70 in any class (other than an identified class eligible for exemption) or a student with disabilities who fails to meet the standards in the Individual Education Plan (IEP) may not participate in extracurricular activities for three school weeks.

- An ineligible student may practice or rehearse; however,
- The student regains eligibility after the seven-calendar day waiting period has ended following a grading period or the three-school week evaluation period when the principal and teachers determine that he or she has earned a passing grade (70 or above) in all classes, other than those that are exempted.

From that point, grades are checked at the end of the grading period. All activity coaches and directors are responsible for obtaining official grade reports from the individual the principal designates as the keeper of official grades before the student represents the school. This provision applies to all grading periods.

It also applies to all three-school week evaluation periods for ineligible students.

- *All students are academically eligible during a school holiday of a full calendar week or more.*
- *When the bell rings to dismiss students for the December holidays, all students are academically eligible until classes resume in January. The same is true for fall and spring breaks provided those breaks consist of at least a full calendar week.*

Semester Grades and STAAR Assessment Scores

Schools with traditional nine-week grading periods must continue to use the second nine weeks grade to determine eligibility since the law requires eligibility to be based on the previous grading period during the school year. Semester grades and STAAR Assessment Scores are not used for eligibility purposes.

Promotion Standards/Grade Level Certification:

Credits earned determine how a student is classified as of September 1 for that entire school year per EIE Local. Credits required for grade level classification:

Grade 9	0-5.5 credits

Grade 10	minimum of 6-11.5 credits and entering at least second year in an accredited high school
Grade 11	minimum of 12-18.5 credits and entering at least third year in an accredited high school
Grade 12	minimum of 19+ credits and entering at least fourth year in an accredited high school OR has completed the early graduation application process

The required course load for each student is seven courses. A senior, with twenty-one credits, successfully passed all EOCs, and administrative and parental approval, may be excused first and/or seventh or sixth and/or seventh.

- For students who need to recovery credits, Gregory-Portland High School utilizes an alternative program model to allow students to earn the required credits on time with their age peers and graduate on time from high school.
- For students who need a non-traditional learning environment, G-P ISD offers a non-traditional setting, Wildcat Learning Center, where students can earn a high school diploma and prepare for post-high school life.

Gifted and Talented Services

Gregory-Portland Independent School District's Gifted/Talented Education Program provides an array of learning opportunities that are commensurate with the abilities of gifted and talented (GT) students, emphasizing accelerated and enriched content in language arts, math, science, and social studies. Identified GT students are provided with a learning environment that allows for independent study, group work with peers of comparative ability, and group work with peers who represent a heterogeneous population. At Gregory-Portland High School, GT students receive differentiated instruction through advanced academics courses in the four core academic areas. Differentiation is outlined by the classroom teacher through classroom instruction, assignments, grouping, material, and/or grading techniques.

Students may be nominated for the GT program by teachers, parents, counselors, librarians, administrators, or community members. Students may be nominated annually for the gifted and talented program by teachers, counselors, parents, or other interested persons. Nominations are in November-December. Screening takes place in March-April. For more information, please contact your campus guidance counselor.

Advanced Academics

Students can prepare for future college work and Advanced Placement courses by taking Advanced/Pre-AP courses in high school. The Advanced Placement (AP) Program is a cooperative educational endeavor between secondary schools, colleges, and universities. For students who are willing and able to apply themselves to college-level studies, the AP Program enriches their secondary and post-secondary school experiences. It also provides the means for colleges to grant credit, placement, or both to students who have applied themselves successfully.

Students should elect to participate in AP courses based on their preparation for such a course, their willingness and ability to meet its academic challenges, and the time he/she is willing todevote. After the completion of the AP courses, students are given the opportunity to take the AP exam in May. Current testing registration occurs in early fall. Please refer to the College Board website and/or the Testing Coordinator for details. All students taking AP courses are expected to take the AP exam for the course.

The fee for this exam is approximately $100.00 and is the responsibility of the student. For payment assistance, please see the counselor.

AP teachers have had training in the course design, which remains consistent throughout the United States. Teachers are not allowed latitude in the high academic standards of the course. Therefore, students must be willing to meet the challenges as presented by these college level courses.

Advanced Placement, Advanced, and Pre-AP Courses:

The purpose for Advanced Courses, including Advanced Placement (AP), Pre-Advanced Placement (Pre-AP) and Advanced, is to strengthen the transition between high school and college and provide for greater success in higher level courses. The goal is to foster student responsibility for scholarship by providing the opportunity to work at an advanced level and better prepare students to eventually take the AP Exam and perhaps earn college credit. Typically, successful AP and Pre-AP students are task oriented, proficient readers, who can establish priorities for their use of time and who have parental support.

AP, Pre-AP, and Advanced courses are different from regular high school courses in that they are taught with higher level curricula and materials, some of which may need to be purchased by the student. Other characteristics of AP and Pre-AP courses include content immersion, accelerated pacing, and assessment of performance at analysis and synthesis levels.

Student Responsibilities:

- Students agree to organize their time and effort to successfully complete AP, Pre-AP, and Advanced courses.
- Students understand these courses are demanding and agree to put forth the effort needed in order to be successful, which may include doing outside reading and assignments.
- Students agree to confer with the teacher and act if they fall behind.
- Students understand that if they fail with less than a 55% in an advanced course at the 1st 6-week mark of either semester, they may be removed from the course.
- Students and parents understand there may be costs associated with AP testing.
- Students are expected to take the AP exam at the conclusion of an AP course.

Dual Credit Courses

Dual credit courses are designed to provide students an opportunity for greater academic challenge and to reward these students by granting college credit and high school graduation credit concurrently. Dual credit courses encourage a wise use of time while offering considerable savings in money when compared to earning the same credit at a traditional college away from home. Dual credit courses are college-level academic or technical courses taken by high school students for which they receive high school credit and college credit simultaneously.

Students and parents are responsible for meeting admission procedures set by the Institution of Higher Education providing the course or courses. Please note: Since policies, procedures, and grading guidelines are set by the Institution of Higher Education, G-PHS does not have control over these requirements.

The Dual Credit Requirements include:

- providing qualifying placement scores from college entrance exams,
- completing both required applications for enrollment, the dual credit enrollment application that must be approved by a counselor, and the ApplyTexas application,
- adhering to all college admission deadlines,

- completing all course billing requirements by higher education deadlines through the institution of higher learning, and
- purchasing necessary textbooks and supplies.

Dual Credit college courses may be offered online, onsite, and/or at participating colleges and taught by a Del Mar professor or G-P High School teacher. There will be a *mandatory parent meeting* each spring that will provide information as to course availability, deadline information, and mode of instruction delivery.

The Institute of Higher Education grants credit when:

1. Course requirements are met, and
2. The student's final transcript is received showing the date of his/her high school graduation.

Note: Letter grades issued by the institution of higher learning will be translated into numerical grades in accordance with 19 TAC 75.191. Numerical grades earned in dual credit will become a part of the student's permanent high school record and will be included on the official academic achievement record (transcript). It is imperative that the Institution of Higher Learning website be checked for drop deadlines. Dropping a dual credit course in high school will not count as one of the 6 allowable college drops. Students dropping a dual credit course will not be allowed to enroll in a similar AP course. Dropped courses could have an impact on financial aid eligibility and failed courses affect college GPA.

Dropping a Dual Credit Course:

Because of the inconsistencies between the curriculum in Dual Credit courses and high school courses, it is necessary for students who want to drop a Dual Credit course to follow these guidelines:

- The Dual Credit Principles of Macroeconomics course must be dropped no later than the last day of the 2nd week of instruction of the Dual Credit course.
- If a student drops a CTE Dual Credit course without extenuating circumstances after the 2nd week of instruction of the course, students will be required to reimburse the campus for the paid tuition costs. (This does not apply to P-TECH.)
- Student schedules will be adjusted accordingly.

For more information and details on dual credit classes at GPHS please view the Dual Credit page on the high school website.
www.g-pisd.org/gphs/campus-info/counselors-scholarships/dual-credit-info

Special Education Services

G-PISD has the responsibility to provide educational and related services to eligible students in the least restrictive environment appropriate to meet the needs of each individual student. G-PISD will ensure students with disabilities can participate in educational programs and activities with students who do not have disabilities to the maximum extent appropriate. If a student has, or is suspected of having, a disability and requires specialized services, then parents, teachers, administrators, or any other district employee should contact a campus counselor for information concerning the special education referral process.

Skills may be attained through special education accommodations, modifications, or instruction and related services as determined by the Admission, Review, and Dismissal (ARD) Committee. The ARD Committee shall determine the appropriate instructional setting for each student who receives special education services, and these shall be specified in the student's IEP.

Section 504 Services

Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA) prohibits discrimination and assures that disabled students have educational opportunities and benefits equal to those provided to non-disabled students. Section 504 and the ADA cover three types of students: (1) those who have an impairment, (2) those who have a record of an impairment, and (3) those who are regarded as having an impairment. Parents, teachers, administrators, or any other district employee(s) who know of or suspect a student may have a disability or require special services should contact the campus Section 504 Coordinator for information regarding evaluation and services.

Credit Recovery

If a course is failed, there may be credit recovery options made available, such as, but not limited to, a credit recovery class, summer school, and winter night school. Students will receive credit on transcripts for courses taken through credit recovery methods. Grades achieved will not be utilized to calculate the student's GPA or class rank.

Course Descriptions

English Language Arts and Reading

English I **Credit 1.0**
PEIMS: 03220100, Alt: 03220107
Local Code: 1001 **Applied Code: 1001S** **Adaptive Code: 1450A**
Grade: 9
TEA Pre-Requisite: None

The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

English I Pre-AP **Credit 1.0**
PEIMS: 03220100
Local Code: 1020
Weighted GPA Course
Grade: 9
TEA Pre-Requisite: None

The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

English II **Credit 1.0**
PEIMS: 03220200, Alt: 03220207
Local Code: 1100 **Applied Code: 1100S** **Adaptive Code: 1460A**
Grade: 10
TEA Pre-Requisite: None

The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

English II Pre-AP **Credit 1.0**
PEIMS: 03220200
Local Code: 1120
Weighted GPA Course
Grade: 10
TEA Pre-Requisite: None
The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

English III **Credit 1.0**
PEIMS: 03220300
Local Code: 1200 **Applied Code: 1200S** **Adaptive Code: 1470A**
Grade: 11
TEA Pre-Requisite: None
The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

Advanced Placement Language and Composition (AP English III) **Credit 1.0**
PEIMS # A3220100
Local Code: 1220
Grade: 11
Weighted GPA Course
TEA Pre-Requisite: None
In this course, you will learn about the elements of argument and composition as you develop your critical-reading and writing skills. You'll read and analyze nonfiction works from various periods and write essays with different aims: for example, to explain an idea, argue a point, or persuade your reader of something.

English IV **Credit 1.0**
PEIMS: 03220400
Local Code: 1300 **Applied Code: 1300S** **Adaptive Code: 1480A**
Grade: 12
TEA Pre-Requisite: None
The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic

oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

****For students whose graduation plan allows, students may substitute a 4th English course for English IV. These courses satisfy the English IV requirement: Yearbook III, Newspaper III, Debate III, Creative Writing, College Prep ELAR, and AP Literature and Composition.****

Advanced Placement Literature and Composition (AP English IV) Credit 1.0
PEIMS: A3220200
Local Code: 1310
Grade: 12
Weighted GPA Course

In this course, you will learn about the elements of argument and composition as you develop your critical-reading and writing skills. You'll read and analyze nonfiction works from various periods and write essays with different aims: for example, to explain an idea, argue a point, or persuade your reader of something.

English IV Dual Credit Credit 1.0
PEIMS: 03220400
Local Code: 1320
Grade: 12
Weighted GPA Course
<u>Prerequisite</u>: Dual Credit Requirements

ENGL 1301 (fall): This course is an intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis will be placed on effective rhetorical choices, including audience, purpose, arrangement, and style. Students will focus on writing academic essays as a vehicle for learning, communicating, and critical analysis.

ENGL 1302 (spring): This course is an intensive study of and practice in strategies and techniques for developing research-based expository and persuasive texts. Emphasis will be placed on effective and ethical rhetorical inquiry, including primary and secondary research methods, critical reading of verbal, visual, and multimedia texts, systematic evaluation, synthesis and documentation of information sources, and critical thinking about evidence and conclusions.

College Preparatory English Language Arts and Reading Credit 1.0
PEIMS: CP110100
Local Code: 1350
Grade: 12
<u>TEA Pre-Requisite</u>: None

This year-long course is designed to help prepare students for college-level courses. As such, students will learn to apply critical reading strategies for organizing, summarizing, analyzing, and evaluating college-level readings. Students will also learn to write effective, logical essays utilizing textual support to develop reading comprehension strategies and to analyze, synthesize, and make value judgements using critical thinking. Students must meet all syllabus requirements to receive credit. Credit recovery options are not permitted for this course. Students who successfully complete this course will not have to pass the TSIA in English for admittance into Del Mar.

Creative Writing **Credit 1.0**
PEIMS: 03221200
Local Code: 1700
Grade: 9-12
TEA Pre-Requisite: None
The study of creative writing allows high school students to earn one-half to one credit while developing versatility as a writer. Creative Writing, a rigorous composition course, asks high school students to demonstrate their skill in such forms of writing as fictional writing, short stories, poetry, and drama. All students are expected to demonstrate an understanding of the recursive nature of the writing process, effectively applying the conventions of usage and the mechanics of written English. The students' evaluation of their own writing as well as the writing of others ensures that students completing this course can analyze and discuss published and unpublished pieces of writing, develop peer and self-assessments for effective writing, and set their own goals as writers.

Practical Writing Skills **Credit .5-1.0**
PEIMS: 03221300
Local Code: 1680
Grade: 10-12
TEA Pre-Requisite: None
The study of writing allows high school students to earn one-half to one credit while developing skills necessary for practical writing. This course emphasizes skill in the use of conventions and mechanics of written English, the appropriate and effective application of English grammar, the reading comprehension of informational text, and the effective use of vocabulary. Students are expected to understand the recursive nature of reading and writing. Evaluation of students' own writing as well as the writing of others ensures that students completing this course can analyze and evaluate their writing.

Reading I **Credit 1.0**
PEIMS: 03270700
Local Code: 1030
Grade: 9
TEA Pre-Requisite: None
Reading I offers students reading instruction to successfully navigate academic demands as well as attain life-long literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provides students an opportunity to read with competence, confidence, and understanding. Students learn how traditional and electronic texts are organized and how authors choose language for effect. All these strategies are applied in instructional-level and independent-level texts that cross the content areas.

Journalism **Credit: .5**
PEIMS: 03230100
Local Code: 1660
Grade: 9-12
TEA Pre-Requisite: None
This is an introductory course to newspaper and yearbook production. Students will receive basic instruction on news writing, feature writing, editorial writing, and headline writing. Students will also learn basic desktop publishing and photography skills.

Photojournalism **Credit: .5**
PEIMS: 03230800
Local Code: 1600
Grade: 9-12
TEA Pre-Requisite: None
Photojournalism stresses the use of images to tell a story. Units of study will include basic photography, digital photo preparation, caption writing, and publication layout and design. Students will produce a variety of photos and layout projects.

Advanced Journalism (Yearbook I) **Credit: 0.5-1.0**
PEIMS: 03230110
Local Code: 1640
Grade: 9-12
Prerequisite: Journalism I, Photojournalism
This course is to produce the student memory book. Applicants must demonstrate a flair for creativity, an interest in student affairs, and the ability to work cooperatively with others. Extra time is required outside of class. This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Advanced Journalism (Newspaper I) **Credit: 0.5-1.0**
PEIMS: 03230140
Local Code: 1610
Prerequisite: Journalism I, Photojournalism
This course is to produce the student newspaper. Applicants must demonstrate an interest in writing, news reporting, photography, and student affairs. Students must also work cooperatively with others. This course requires time in addition to regular class time. This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Advanced Journalism (Newspaper II and III) **Credit: 0.5-1.0**
PEIMS: 03230150, 03230160
Local Code: 1620, 1630
Prerequisite: Journalism I, Advanced Newspaper I
Students in these courses must be willing to accept the challenges of higher-level thinking skills, leadership roles (such as editor), responsibilities, independent research, extensive writing, advanced graphic and design, and desktop publishing. Extensive time is required outside of class. This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Advanced Journalism (Yearbook II and III) **Credit: 0.5-1.0**
PEIMS: 03230120, 03230130
Local Code: 1650, 1670
Prerequisite: Journalism I, Advanced Yearbook Production I
Students in these courses must be willing to accept the challenges of higher-level thinking skills, leadership roles (such as editor), more independent research, extensive writing, advanced graphics and design, desktop publishing, and advanced photography techniques. Extensive time is required outside of class. This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Debate I, II, and III **Credit: 1.0**
PEIMS: 03240600, 03240700, 03240800
Local Code: 8400, 8410, 8430
Debate offers the student an opportunity to learn and practice skills that they will be able to utilize for the rest of their lives. In debate, the student will research multiple topics and use this research to create cases on both sides of the resolution. The student will learn to use and apply logic. Most importantly, the student will be coached and will be given many chances to practice their skill set by debating at tournaments. In addition to the educational benefits, the student will be able to advance to state and national tournaments that will garner honors and open scholarship opportunities. Each student will learn Cross-Examination Debate, Lincoln-Douglas Debate, Public Forum Debate, and Congressional Debate. This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Fundamentals of Public Speaking DC (Professional Communications) **Credit: 0.5**
PEIMS: 13009900
Local Code: 8419, 8420 (Not a core English Credit)
Prerequisite: Dual Credit Requirements
Weighted GPA Course
SPCH 1315 (fall or spring): This is an introductory course in the theories and practices of speech communication behavior in public communication situations. Topics include listener and audience analysis with an emphasis on research, organization, and delivery of informative and persuasive presentations.

Mathematics

Algebra I **Credit 1.0**
PEIMS: 03100500, Alt: 03100507
Local Code: 2640 **Applied Code: 2640S** **Adaptive: 2230A**
Grade: 9
TEA Pre-Requisite: None
In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations.

Algebra I Pre-AP **Credit 1.0**
PEIMS: 03100500
Local Code: 2650
Grade: 9
Weighted GPA Course
TEA Pre-Requisite: None
In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-

world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations.

Geometry **Credit 1.0**
PEIMS # 03100700
Local Code: 2680 **Applied Code: 2680S** **Adaptive Code: 2240A**
Grade: 9-12
Prerequisite: Algebra I
In Geometry, students will build on the knowledge and skills for mathematics in Grade 8 and Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Due to the emphasis of probability and statistics in the college and career readiness standards, standards dealing with probability have been added to the geometry curriculum to ensure students have proper exposure to these topics before pursuing their post-secondary education.

Geometry Pre-AP **Credit 1.0**
PEIMS # 03100700
Local Code: 2690
Grade: 9-12
Weighted GPA Course
Prerequisite: Algebra I
In Geometry, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Due to the emphasis of probability and statistics in the college and career readiness standards, standards dealing with probability have been added to the geometry curriculum to ensure students have proper exposure to these topics before pursuing their post-secondary education.

Algebra II **Credit 1.0**
PEIMS # 03100600
Local Code: 2660 **Applied Code: 2660S** **Adaptive Code: 2250A**
Grade: 9-12
Prerequisite: Algebra I
In Algebra II, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods.

Algebra II Advanced **Credit 1.0**
PEIMS # 03100600
Local Code: 2670
Grade: 9-12
Weighted GPA Course
Prerequisite: Algebra I
In Algebra II, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods.

Accounting II **Credit 1.0**
PEIMS # 13016700
Local Code: 9760
Grade: 11-12
Prerequisite: Accounting I
Extend your knowledge of basic accounting and managerial decision making. Produce and analyze financial reports. Capture all details necessary to satisfy the needs of a business: managerial, financial reporting, projection, analysis, and tax reporting.

Advanced Quantitative Reasoning **Credit 1.0**
PEIMS # 03102510
Local Code: 3040
Grade: 9-12
Prerequisite: Geometry and Algebra II
Students will develop and apply skills necessary for college, careers, and life. Course content consists primarily of applications of high school mathematics concepts to prepare students to become well-educated and highly informed 21st century citizens. Students will develop and apply reasoning, planning, and communication to make decisions and solve problems in applied situations involving numerical reasoning, probability, statistical analysis, finance, mathematical selection, and modeling with algebra, geometry, trigonometry, and discrete mathematics.

Algebraic Reasoning **Credit 1.0**
PEIMS # 03102540
Local Code: 2220 **Applied Code: 2220S**
Grade: 9-12
Prerequisite: Algebra I
Students will build on knowledge and skills and continue with the development of mathematical reasoning related to algebraic understandings and processes. 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.

Precalculus **Credit: 1.0**

PEIMS # 03101100

Local Code: 2700

Grade 9-12

Prerequisite: Algebra I, Geometry, Algebra II

The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Precalculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels.

Precalculus Advanced **Credit: 1.0**

PEIMS # 03101100

Local Code: 2710

Grade: 9-12

Weighted GPA Course

Prerequisite: Algebra I, Geometry, Algebra II

This course develops the central ideas, concepts, formulas, and problem-solving techniques essential to understanding the foundation of Calculus. Emphasis will be placed on the function concept as well as many important concepts in trigonometry, advanced algebra, and analytic geometry. This course is designed to challenge the student who has a strong interest and ability in the study of mathematics.

Calculus AB Advanced Placement **Credit 1.0**

PEIMS # A3100101

Local Code: 2750

Grade: 11-12

Weighted GPA Course

TEA Pre-Requisite: None

The major topics for Calculus AB are differential and integral calculus including such as limits, continuity, derivatives of elementary functions, velocity and acceleration in linear motion, techniques of integration, area between curves, volumes of solids of known cross-sections, and the fundamental theorem of calculus.

Calculus BC Advanced Placement **Credit 1.0**

PEIMS #A3100102

Local Code: 2780

Grade:12

Weighted GPA Course

TEA Pre-Requisite: None

Calculus BC Explore the concepts, methods, and applications of differential and integral calculus, including topics such as parametric, polar, and vector functions, and series. You'll perform experiments and investigations and solve problems by applying your knowledge and skills.

Calculus I Dual Credit (online only) **Credit 1.0 (1 period)**
(Independent Study in Mathematics, 2nd time taken)
PEIMS # 03102501
Local Code: 2760
Grade: 11-12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
MATH 2413: This course focuses on limits, continuity, differentiation with applications, integration, definite integral with properties, and applications of integration. This course requires a one-hour lab.

College Algebra Dual Credit (online only) **Credit 1 (1 period)**
(Independent Study in Mathematics, 1st time taken)
PEIMS # 03102500
Local Code: 2790
Grade: 12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
MATH 1314: Students will learn the fundamentals of algebra, including inequalities, functions, quadratic equations, exponential and logarithmic functions, systems of equations, determinants, and potentially binomial thereon or progressions.

College Preparatory Course Mathematics **Credit 1.0**
PEIMS # CP111200
Local Code: 3030
Grade: 12
TEA Pre-Requisite: None
This course is designed to be a full-year course that prepares students for success in entry-level college courses and/or success on the TSI Assessment. Preparatory Mathematics is a rigorous course that will include student learning outcomes in the following areas: elementary algebra and functions, intermediate algebra and functions, geometry and measurement, data analysis, statistics, and probability. Students must meet all syllabus requirements to receive credit. Credit recovery options are not available for this course.

Elementary Statistical Methods Dual Credit (online only) **Credit 1.0 (1 period)**
PEIMS # 03102530
Local Code: 2800
Grade: 11-12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
MATH 1342: Students will learn frequency distributions, measures of location, variation, probability-basic rules, concepts of random variables and their distributions (including binomial and normal), and statistical inference including confidence intervals, tests of hypotheses, p-values, and an introduction to linear regression.

Financial Mathematics **Credit 1.0**
PEIMS #13018000
Local Code: 7037
Grade:10-12
Prerequisite: Algebra I
In this course, students explore personal money management such as banking, taxes, loans, credit cards, and investments while applying critical thinking skills to analyze personal financial decisions based on current and projected economic factors. This course relies heavily on the usage of Microsoft Excel to calculate important financial data. This course satisfies one of the four required math credits for graduation.

Industrial Math Dual Credit **Credit: 1.0**
PEIMS # 12701410
Local Code: 2745
Grade: 9-12
Prerequisite: Dual Credit Requirements
TECM1301: This class focuses on math skills applicable to industrial occupations and includes fractions, decimal manipulation, measurement, percentage, problem solving techniques for equations, and ratio/proportion application. (For students enrolled in DMC Welding Program)

Mathematical Models with Application **Credit: 1.0**
PEIMS # 03102400
Local Code: 2720
Grade: 9-12
Prerequisite: Algebra I
This mathematics course provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions. Students will select from tools such as physical objects; manipulatives; technology, including graphing calculators, data collection devices, and computers; and paper and pencil and from methods such as algebraic techniques, geometric reasoning, patterns, and mental math to solve problems.

Plane Trigonometry Dual Credit (online only) **Credit: 1.0 (1 period)**
(Independent Study in Mathematics – third time taken)
PEIMS # 03102502
Local Code: 2795, 2796
Grade: 11-12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
MATH 1316: Students will analyze trigonometric functions, identities, height and distance, equations involving trigonometric functions, solutions of trials, area, vectors and their basic applications, and inverse functions.

Robotics II **Credit: 1.0**
PEIMS # 13037050
Grade: 10-12
Local Code: 9634
Prerequisite: Robotics I
In Robotics II, students will apply academic skills learned in the previous course to implement designs for real world problems in a project-based environment through the engineering design process. The course will focus heavily in prior knowledge from other STEM courses. Students will design prototypes and use simulation software to test the applications of their designs. Students will work in groups to build and test increasingly more complex mobile robots, culminating in an end-of-semester robotics contest. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Statistics Advanced Placement **Credit: 1.0**
PEIMS # A3100200
Local Code: 2770
Grade: 11-12
Weighted GPA Course
Prerequisite: Geometry, Algebra II or Algebra II Advanced
This course will introduce students to statistical concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will explore data and make use of graphical and numerical techniques to study patterns and departures from patterns. Using probability as a tool, students will anticipate and model data distribution to obtain statistical inferences and conclusions from data. Students may concurrently enroll in Precalculus Advanced.

Science

Biology **Credit: 1.0**
PEIMS: 03010200 **Local Code: 3140** **Applied Code: 3140S**
PEIMS: 03010207 **Adaptive Local Code: 3140A**
Grade:9-12
Prerequisite: None
In Biology, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biology study a variety of topics that include structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; and ecosystems and the environment.

Biology Pre-AP **Credit: 1.0**
PEIMS: 03010200
Local Code: 3150
Grade: 9-12
TEA Prerequisite: None
Weighted GPA Course
Pre-AP Biology is developed as a course for the academically gifted or college bound student. This advanced course takes the concepts of biology and expands them to include an in-depth study of evolution, ecology, cellular biology, microbiology, genetics, and biotechnology in order to prepare students for future Advanced Placement studies as well as prepare students to take a full range of other advanced science courses. This course is also designed to provide advanced knowledge of biology concepts to prepare students for the biology end-of-course exam.

Chemistry **Credit: 1.0**
PEIMS: 03040000
Local Code: 3200 **Applied Code: 3200S** **Adaptive Code: 3200A**
Grade: 9-12
TEA Prerequisite: 1 high school science credit, Algebra I
This is a lab course that emphasizes a variety of topics that include characteristics of matter, energy transformation during physical and chemical changes, atomic structure, period table of elements, behavior of gases, bonding, nuclear fusion, nuclear fission, oxidation-reduction, chemical equations, solutes, properties of solutions, acids, bases, and chemical reactions.

Chemistry Pre-AP **Credit: 1.0**
PEIMS: 03040000
Local Code: 3210
Grade: 9-12
TEA Prerequisite: 1 high school science credit, Algebra I
Weighted GPA Course
This is a lab course that emphasizes a variety of topics that include characteristics of matter, energy transformation during physical and chemical changes, atomic structure, period table of elements, behavior of gases, bonding, nuclear fusion, nuclear fission, oxidation-reduction, chemical equations, solutes, properties of solutions, acids, bases, and chemical reactions.

Integrated Physics and Chemistry **Credit: 1.0**
PEIMS: 03060201
Local Code: 3120 **Applied Code: 3120S** **Adaptive Code: 3120A**
Grade: 9-12
TEA Prerequisite: None
This course is a study of integrated physical science principles, which govern the materials and forces around us. This course is designed to provide a solid background in the physical sciences for students by preparing students for future success in other science courses. Through laboratory and classroom experiences, students will integrate introductory concepts in chemistry and physics to prepare them for advanced life and earth sciences. Enrichment and application will be emphasized with experiments, research, critical thinking, problem-solving, and multicultural connections. It will also integrate the disciplines of physics and chemistry in the following topics: motion, waves, transformations, properties of matter, changes in matter, and solution chemistry.

Advanced Animal Science **Credit: 1.0**
PEIMS: 13000700
Local Code: 9116
Grade: 11-12
TEA Prerequisite: Prerequisite: Biology or Chemistry or IPC; Algebra I; Geometry; either Small Animal Management, Equine Science or Livestock Production, or Principles of Agriculture, Food, and Natural Resources
Students who want to learn the scientific and technological aspect of animal science through laboratory experiences should select this course. These investigations will involve actively obtaining and analyzing data with physical equipment and may also involve experimentation in a simulated environment with field observations that extend beyond the classroom.

Advanced Plant Science **Credit: 1.0**
PEIMS: 13002100
Local Code: 9160
Grades: 11-12
TEA Prerequisite: None
Learn about the natural world and how plant and soil science has influenced a vast body of knowledge with applications still to be discovered. Prepare for careers in the food and fiber industry.

Anatomy and Physiology of Human Systems **Credit: 1.0**
PEIMS: 13020600
Local Code: 3360
Grade: 11-12
TEA Prerequisite: Biology and a second-high school science credit
Anatomy and Physiology is a class designed to give students an in-depth introduction to the anatomy and physiology of the human body. This class will provide students with an overall understanding of the structures, organs, and systems that make up the human body. Lab experiments will include fresh and preserved specimens and digital dissections. Students will take a comparative approach using various organs. In investigations, students will be required to observe, record, interpret, and analyze scientific data in an organized problem-solving method.

Aquatic Science **Credit: 1.0**
PEIMS: 03030000
Local Code: 3250 **Adaptive Code: 3250A**
Grade: 10-12
TEA Prerequisite: Biology
Aquatic Science is a laboratory-based and field-based course that investigates the biodiversity of salt water and freshwater organisms including their interactions with the physical and chemical environment. The special characteristics of aquatic resources will also be examined. This class encourages students to join in an exploration of the global and local aquatic world. Through field trips, classroom academic work, field and laboratory research, and periodic field trips, students will gain an understanding and appreciation of our oceans, lakes, rivers, and the creatures that inhabit them. The students will also assess the importance of legislation and policy making on the regulation of water.

Biology AP **Credit: 1.0**
PEIMS: A3010200
Local Code: 3170
Grade: 11-12
Weighted GPA Course
Prerequisite: Biology and Chemistry
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. This course requires that 25 percent of the instructional time be spent in hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting where they direct and monitor their progress.

Biological Concepts I: Cellular and Molecular Dual Credit **Credit: 1.0**
PEIMS: 13037200
Local Code: 3160
Grade: 11-12
Prerequisite: Dual Credit Requirements
Weighted GPA Course
BIOL 1406 (fall): This course provides a foundation in biological concepts for students majoring in the sciences. Topics include fundamentals of molecular biology, cell structure and function, cellular respiration, photosynthesis, cell reproduction, genetics, and biotechnology.
BIOL 1407 (spring): This course provides a foundation in biological concepts for students majoring in the sciences. Topics include evolution, the origin and history of life, classification and diversity of life, plant and animal structures, functions and life cycles, behavior, and ecology and global ecology. This course is recommended for students majoring in the biological sciences and related disciplines.

Chemistry AP **Credit: 1.0**
PEIMS: A3040000
Local Code: 3230
Grade: 11-12
Prerequisite: Chemistry and Algebra II
Weighted GPA Course
Learn about the fundamental concepts of chemistry including structure and states of matter, intermolecular forces, and reactions. You'll do hands-on lab investigations and use chemical calculations to solve problems.

Earth and Space Science **Credit: 1.0**
PEIMS: 03060200
Local Code: 3260
Grade: 12
TEA Prerequisite: 3 high school science credits (one of which may be taken concurrently), 3 high school math credits (one of which may be taken concurrently)
Earth and Space Science (ESS) is a capstone course designed to build on a student's prior science knowledge and skills to understand the Earth's system in space and time. Students study a variety of topics that include theories of the origin of the universe and solar system, models of formation of Earth's atmosphere, hydrosphere, and geosphere, scientific dating methods of fossils and rock sequences, the composition of the Earth's interior, plate tectonics theory, and energy distribution in the Earth's subsystems. Students will appreciate the interaction of the components of the Earth's system in terms of both natural and human-influenced processes.

Environmental Science AP **Credit: 1.0**
PEIMS: A3020000
Local Code: 3290
Grade: 11-12
Prerequisite: Two years of high school lab science, Algebra I
Weighted GPA Course
Environmental Science AP is a science-based, relevant, interdisciplinary course that combines ideas from the natural and social sciences. Students will study the interconnections between the environmental and societal systems. The content areas addressed in this course include interdependence of Earth's systems, human population dynamics, renewable/nonrenewable resources (distribution, ownership, use, degradation), environmental quality, global changes/consequences, and environment/society.

Environmental Systems **Credit: 1.0**
PEIMS: 03020000
Local Code: 3340
Grade: 11-12
Suggested Prerequisite: one-unit high school life science and one unit of high school physical science
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. Students study a variety of topics that include biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources, and flow of energy through an environmental system, relationship between carrying capacity and changes in populations and ecosystems, and changes in environments.

Forensic Science **Credit: 1.0**
PEIMS: 13029500
Local Code: 3350
Grade: 11-12
Prerequisite: Biology and Chemistry
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. *This course satisfies a high school science graduation requirement.*

Laboratory Management (Local Credit Only)
Local Code: 3270
Grade: 12
Prerequisite: 3 High School Science Credits
This course provides advanced level and enrichment experience in laboratory safety, investigative lab techniques, and investigative design. Students must be able to communicate laboratory and safety directives and laboratory procedures in both oral and written form.

Physics **Credit: 1.0**
PEIMS: 03050000
Local Code: 3300
Grade: 9-12
TEA Prerequisite: None
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. Students who successfully complete Physics will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, work collaboratively with colleagues, and develop critical-thinking skills.

Physics 1 AP (Algebra-Based) **Credit: 1.0**
PEIMS: A3050003
Local Code: 3330
Grade: 11-12
Weighted GPA Course
Prerequisite: Geometry and Concurrent Algebra II
AP Physics 1 is an algebra-based, introductory college-level physics 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, electric charge and electric force, DC circuits, and mechanical waves and sound. AP® Science Practices emphasize inquiry-based learning and development of critical thinking and reasoning skills. Inquiry-based learning involves exploratory learning to gain new knowledge. Students begin by seeing a given physics topic. Students then explore that topic using scientific methodology, as opposed to simply being told about it in lecture. In this way, students learn the content through self- discovery rather than memorization.

Physics 2 AP (Algebra-Based) **Credit: 1.0**
PEIMS: A3050004
Local Code: 3331
Grade: 11-12
Weighted GPA Course
Prerequisite: AP Physics 1
AP Physics 2 is an algebra-based, introductory college-level physics 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. AP® Science Practices emphasize inquiry-based learning and development of critical thinking and reasoning skills. Inquiry- based learning involves exploratory learning to gain new knowledge. Students begin by seeing a given physics topic. Students then explore that topic using scientific methodology, as opposed to simply being told about it in lecture. In this way, students learn the content through self-discovery rather than memorization.

Physics AP Electricity and Magnetism **Credit: 1.0**
PEIMS: A3050005
Local Code: 3332
Grade: 12
Prerequisite: Calculus, can be concurrent
Weighted GPA Course
The Advanced Placement Physics C Electricity and Magnetism course is equivalent to the second semester of a calculus-based, college-level physics course. It is especially appropriate for students planning to specialize or major in physical science or engineering. Topics explored in the course include electrostatics, conductors, capacitors, and dielectrics, electric circuits, magnetic fields, and electromagnetism. Introductory differential and integral calculus are used throughout the course. As such, concurrent enrollment in a Calculus course is expected. For students with intent to major in life sciences, pre-medicine, and some applied sciences, AP Physics C will serve as a one-year terminal course and upon successful completion of the exam, will fulfill the physics requirement in college for students. For students

intending to major in the physical sciences or engineering, AP Physics C will serve as a foundation for more advanced physics course work.

Physics C AP Mechanics (Semester 2) **Credit: 1.0**
PEIMS: A3050006
Local Code: 3333
Grade: 11-12
Prerequisite: Calculus, can be concurrent
Weighted GPA Course
The course explores topics such as kinematics, Newton's laws of motion, work, energy and power, systems of particles and linear momentum, circular motion and rotation, and oscillations and gravitation. Introductory differential and integral calculus are used throughout the course. As such, concurrent enrollment or prior completion of a Calculus course is required. For students with intent to major in life sciences, pre-medicine, and some applied sciences, AP Physics C will serve as a one-year terminal course and, upon successful completion of the exam, will fulfill the physics requirement in college for students. For students intending to major in the physical sciences or engineering, AP Physics C will serve as a foundation for more advanced physics course work.

Scientific Research and Design **Credit: 1.0**
PEIMS: 13037200
Local Code: 3334
Grade: 11-12
TEA Prerequisite: Biology, Chemistry, IPC, or Physics
Scientific Research and Design is a broad-based course that engages students in a program that explores the complexities of science topics and issues. The course has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundation, literary, and philosophical texts, listening to and viewing speeches, broadcasts, and personal accounts. Students learn to synthesize information from these multiple sources, develop their own perspectives in written essays, and design research projects. Student findings will be delivered in oral and visual presentations, both individually and as part of a team.

Social Studies

World Geography Studies **Credit: 1.0**
PEIMS: 03320100
Local Code: 4100 **Adaptive Code: 4100A**
Grade: 9-12
In World Geography Studies, students examine people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present with emphasis on contemporary issues. A significant portion of the course centers around the physical processes that shape patterns in the physical environment; the characteristics of major landforms, climates, and ecosystems and their interrelationships; the political, economic, and social processes that shape cultural patterns of regions; types and patterns of settlement; the distribution and movement of the world population; relationships among people, places, and environments; and the concept of region. Students analyze how location affects economic activities in different economic systems. Students identify the processes that influence

political divisions of the planet and analyze how different points of view affect the development of public policies. Students compare how components of culture shape the characteristics of regions and analyze the impact of technology and human modifications on the physical environment. Students use problem-solving and decision-making skills to ask and answer geographic questions.

World Geography Studies Advanced **Credit: 1.0**
PEIMS: 03320100
Local Code: 4120
Grade: 9-12
Weighted GPA Course

In World Geography Studies, students examine people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present with emphasis on contemporary issues. A significant portion of the course centers around the physical processes that shape patterns in the physical environment; the characteristics of major landforms, climates, and ecosystems and their interrelationships; the political, economic, and social processes that shape cultural patterns of regions; types and patterns of settlement; the distribution and movement of the world population; relationships among people, places, and environments; and the concept of region. Students analyze how location affects economic activities in different economic systems. Students identify the processes that influence political divisions of the planet and analyze how different points of view affect the development of public policies. Students compare how components of culture shape the characteristics of regions and analyze the impact of technology and human modifications on the physical environment. Students use problem-solving and decision-making skills to ask and answer geographic questions.

World History Studies **Credit: 1.0**
PEIMS: 03340400
Local Code: 4110 **Adaptive Code: 4110A**
Grade: 9-12

World History Studies is a survey of the history of humankind. Due to the expanse of world history and the time limitations of the school year, the scope of this course should focus on "essential" concepts and skills that can be applied to various eras, events, and people within the standards in subsection (c) of this section. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in other parts of the world. Students evaluate the causes and effects of political and economic imperialism and of major political revolutions since the 17th century. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which constitutional governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and political concepts. Students examine the history and impact of major religious and philosophical traditions. Students analyze the connections between major developments in science and technology and the growth of industrial economies, and they use the process of historical inquiry to research, interpret, and use multiple sources of evidence.

World History Studies Advanced **Credit: 1.0**
PEIMS: 03340400
Local Code: 4130
Grade: 9-12
Weighted GPA Course
World History Studies is a survey of the history of humankind. Due to the expanse of world history and the time limitations of the school year, the scope of this course should focus on "essential" concepts and skills that can be applied to various eras, events, and people within the standards in subsection (c) of this section. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in other parts of the world. Students evaluate the causes and effects of political and economic imperialism and of major political revolutions since the 17th century. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which constitutional governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and political concepts. Students examine the history and impact of major religious and philosophical traditions. Students analyze the connections between major developments in science and technology and the growth of industrial economies, and they use the process of historical inquiry to research, interpret, and use multiple sources of evidence.

Advanced Placement World History **Credit: 1.0**
PEIMS: A3370100
Local Code: TBD
Grade: 10-12
Weighted GPA Course

This course may be used as a substitute for World History Studies. (b) Content requirements. Content requirements for Advanced Placement (AP) World History are prescribed in the College Board Publication Advanced Placement Course Description in World History, published by The College Board and in §113.42 of this title (relating to World History Studies (One Credit), Adopted 2018).

United States History since 1877 **Credit: 1.0**
PEIMS: 03340100 **Local Code: 4210** **Applied Code: 4210S**
Alt. PEIMS: 03340107 **Adaptive Code: 4210A**
Grade: 11
In United States History Studies Since 1877, which is the second part of a two-year study that begins in Grade 8, students study the history of the United States from 1877 to the present. The course content is based on the founding documents of the U.S. government, which provide a framework for its heritage. Historical content focuses on political, economic, and social events and issues related to industrialization and urbanization, major wars, domestic and foreign policies, and reform movements, including civil rights. Students examine the impact of geographic factors on major events and eras and analyze their causes and effects. Students examine the impact of constitutional issues on American society, evaluate the dynamic relationship of the three branches of the federal government, and analyze efforts to expand the democratic process. Students describe the relationship between the arts and popular culture and the times during which they were created. Students analyze the impact of technological innovations on American life. Students use critical-thinking skills and a variety of primary and secondary source material

to explain and apply different methods that historians use to understand and interpret the past, including multiple points of view and historical context.

Advanced Placement United States History **Credit: 1.0**
PEIMS: A3340100
Local Code: 4220
Grade: 11
Weighted GPA Course
The AP US History course is designed to be a study the cultural, economic, political, and social development that have shaped the United States from c. 1491 to the present. You'll analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments.

United States History Dual Credit **Credit: 1.0**
PEIMS: 03340100
Local Code: 4240
Grade: 9-12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
HIST 1301: This course is a survey of the nation's colonial background, the struggle for independence, and the emergence of political parties with an emphasis on individualism, westward expansion, social reform, and sectionalism.
HIST 1302: This course is a survey of Reconstruction, the impact of industrialization, urbanization, and immigration, the rise of America as a world power, and the quest for economic security and social justice.

United States Government **Credit: 1.0**
PEIMS: 03330100
Local Code: 4371 **Applied Code: 4371S** **Adaptive Code: 4371A**
Grade: 9-12
In United States Government, the focus is on the principles and beliefs upon which the United States was founded and, on the structure, functions, and powers of government at the national, state, and local levels. This course is the culmination of the civic and governmental content and concepts studied from kindergarten through required secondary courses. Students learn major political ideas and forms of government in history. A significant focus of the course is on the U.S. Constitution, its underlying principles and ideas, and the form of government it created. Students analyze major concepts of republicanism, federalism, checks and balances, separation of powers, popular sovereignty, and individual rights and compare the U.S. system of government with other political systems. Students identify the role of government in the U.S. free enterprise system and examine the strategic importance of places to the United States. Students analyze the impact of individuals, political parties, interest groups, and the media on the American political system, evaluate the importance of voluntary individual participation in a constitutional republic, and analyze the rights guaranteed by the U.S. Constitution. Students examine the relationship between governmental policies and the culture of the United States. Students identify examples of government policies that encourage scientific research and use critical-thinking skills to create a product on a contemporary government issue.

United States Government and Politics AP **Credit: 0.5**
PEIMS: A3330100
Local Code: 4373
Grade: 9-12
Weighted GPA Course
In AP US Government and Politics, students will study the key concepts and institutions of the political system and culture of the United States. You'll read, analyze, and discuss the U.S. Constitution and other documents as well as complete research or applied civics project.

Federal Government Dual Credit **Credit: 0.5**
PEIMS: 03330100
Local Code: 4370
Grade: 12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
GOVT 2305: This course analyzes the origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive and judicial branches, federalism, political participation, the national election process, public policy, civil liberties, and civil rights.

Texas Government Dual Credit **Credit: 0.5**
PEIMS: 03380002
Local Code: 4382
Grade: 12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
GOVT 2306: Origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.

Economics with an Emphasis on the Free Enterprise System and its Benefits **Credit 0.5**
PEIMS: 03310300
Local Code: 4391 **Adaptive Code: 4391A**
Grade: 9-12
Economics with Emphasis on the Free Enterprise System and Its Benefits is the culmination of the economic content and concepts studied from kindergarten through required secondary courses. The focus is on the basic principles concerning production, consumption, and distribution of goods and services (the problem of scarcity) in the United States and a comparison with those in other countries around the world. Students analyze the interaction of supply, demand, and price. Students will investigate the concepts of specialization and international trade, economic growth, key economic measurements, and monetary and fiscal policy. Students will study the roles of the Federal Reserve System and other financial institutions, government, and businesses in a free enterprise system. Types of business ownership and market structures are discussed. The course also incorporates instruction in personal financial literacy. Students apply critical-thinking skills using economic concepts to evaluate the costs and benefits of economic issues.

Economics and Personal Financial Literacy **Credit 0.5**
PEIMS: 03380083
Local Code: 4395
Grade 9-12
The Personal Financial Literacy and Economics Course emphasizes the economic way of thinking, which serves as a framework for the personal financial decision-making opportunities introduced in the course. Students will demonstrate the ability to anticipate and address financial challenges as these challenges occur over their lifetime. In addition, students are introduced to common economic and personal financial planning terms and concepts. As a result of learning objective concepts and integrating subjective information, students gain the ability to lead productive and financially self-sufficient lives.
Students may not be awarded credit for both this course and the personal financial literacy course adopted under this subchapter.

Advanced Placement Macroeconomics **Credit 0.5**
PEIMS: A3310200
Local Code: 4394
Grade: 9-12
GPA Weighted Course
This course is intended to have students explore the principles of economics that apply to an economic system. You'll use graphs, charts, and data to analyze, describe, and explain economic concepts.

Principles of Macroeconomics Dual Credit (Online) **Credit 0.5**
PEIMS: 03310300
Local Code: 4390
Grade: 9-12
GPA Weighted Course
Prerequisite: Dual Credit Requirements
ECON 2301 (fall): This course offers an analysis of the economy including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy.
*The Dual Credit Principles of Macroeconomics course must be dropped no later than the last day of the 2nd week of instruction of the Dual Credit course.

Philosophy Dual Credit (Social Studies Advanced Studies) **Credit 0.5**
PEIMS: 03380001
Local Code: 4250
Grade: 9-12
Prerequisite: Dual Credit Requirements
Weighted GPA Course
PHIL 2306 (spring): This course is an introduction to the study of ideas from antiquity to the present, covering topics such as knowledge, religion, ethics, reality, the meaning of life, and current events. Topics also include an introduction to the history, theories, and methods of reasoning.

Psychology **Credit 0.5**
PEIMS: 03350100
Local Code: 4341
Grade 9-12
TEA Prerequisite: None
In psychology, an elective course, students study the science of behavior and mental processes. Students examine the full scope of the science of psychology such as the historical framework, methodologies, human development, motivation, emotion, sensation, perception, personality development, cognition, learning, intelligence, biological foundations, mental health, and social psychology.

Psychology Dual Credit **Credit 0.5**
PEIMS: 03350100
Local Code: 4360
Grade: 9-12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
PSYC 2301 (fall semester): This course is a survey of major topic in psychology with an introduction into the study of behavior and the factors that determine and affect behavior.

Sociology **Credit 0.5**
PEIMS: 03370100
Local Code: 4352
Grade: 9-12
TEA Prerequisite: None
Sociology, an elective course, is an introductory study in social behavior and organization of human society. This course will describe the development of the field as a social science by identifying methods and strategies of research leading to an understanding of how the individual relates to society and the ever-changing world. Students will also learn the importance and role of culture, social structure, socialization, and social change today.

Sociology Dual Credit **Credit 0.5**
PEIMS: 03370100
Local Code: 4365
Grade: 9-12
Weighted GPA Course
Prerequisite: Dual Credit Requirements
SOCI 1301 (spring): This course is an introduction to the concepts and principles used in the study of group life, social institutions, and social processes.

US History through Film (Special Topics in Social Studies) **Credit 0.5-1.0**
PEIMS: 03380002, 03388022
Local Code: 4201, 4202
Grade: 9-12
In Special Topics in Social Studies, an elective course, students are provided the opportunity to develop a greater understanding of the historic, political, economic, geographic, multicultural, and social forces that have shaped their lives and the world in which they live. Students will use social science knowledge and skills to engage in rational and logical analysis of complex problems using a variety of approaches, while recognizing and appreciating diverse human perspectives.

Fine Arts

Art I **Credit 1.0**
PEIMS: 03500100
Local Code: 7100
Grade: 9-12
This class will cover various forms of visual art through perception and expression based on historical and cultural heritage. Students will rely on their environment, memory, background knowledge, spiritual values, imagination, life experiences, direct observation, and learned techniques as a source for creating artwork. Students will apply reflective thinking and develop discipline, problem solving, and higher order and critical thinking skills.

Students will analyze artistic styles and historical periods and will develop respect for the traditions and contributions of diverse cultures. Students will respond to and analyze artworks, thus contributing to the development of lifelong skills of making informed judgments and evaluations.
Students will employ the Elements of Arts and Principles of Design by creating specific artworks that can potentially be used as portfolios or exhibition pieces. Students will also demonstrate effective use of art media, tools, and techniques in two-dimensional design, drawing, painting, printmaking, and sculpture.
*An art supply fee of $25 will be requested from each student.

Drawing II, III, and IV **Credit 1.0**
PEIMS: 03500500, 03501300, 03502300
Local Code: 7120, 7130, 7140
Grade: 9-12
These courses are designed to address a broad interpretation of drawing issues. Students will demonstrate proficiency in two-dimensional design/drawing using a variety of mediums and techniques as well as application of Art Elements and Principles of Design. A strong emphasis will be placed on portfolio proficiency each student will need to complete a series of quality art works to be used as breadth/concentration for potential portfolio submission. It is highly recommended for advanced students to participate in regional and state level competitions. *An art supply fee of $40 will be requested from each student.

Painting II, III, and IV **Credit 1.0**
PEIMS: 0350600, 03501400, 03502400
Local Code: 7150, 7160, 7170
Grade: 9-12
These courses are designed to address a broad interpretation of painting issues. Students will demonstrate proficiency in painting using a variety of mediums and techniques as well as application of Art Elements and Principles of Design. A strong emphasis will be placed on portfolio proficiency. Each student will need to complete a series of quality art works to be used as breadth/concentration for potential portfolio submission. It is highly recommended for advanced students to participate in regional and state level competitions. *An art supply fee of $40 will be requested from each student.

AP Art and Design Program **Credit 1.0**
PEIMS: A3500300
Local Code: 7200
Grade: 9-12
Weighted GPA Course
The AP Art and Design Program includes three different courses: AP 2-D Art and Design, AP 3-D Art and Design, and AP Drawing. In each course, you'll investigate materials, processes, and ideas. You'll make works of art and design by practicing, experimenting, and revising, and you will communicate your ideas about art and design through written and visual expression.

Competitive Art II, III, and IV **Credit 1.0**
PEIMS: 03500200, 03500300, 03500400
Local Code: 7120C, 7130C, 7140C
Grade: 9-12
Prerequisite: Any Art Level 1, Application Required (Due to Limited Space)

Band I, II, III, and IV **Credit: 1.0**
PEIMS: 03150100, 03150200, 03150300, 03150400
Local Code: 8300, 8310, 8320, 8330
Prerequisite: Band I- application; Band II- application and Band I; Band III- application, Band I, and Band II; Band IV- application, Band I, Band II, and Band III
Grade: 9-12
These courses are offered to the student with previous band experience. It is a performing organization in the school and includes a marching band, the honors band, the symphonic band, and the concert band.
*The state allows two semesters of fall band to count for two semesters of physical education. The spring semester of band will count as a half credit of fine arts.
*This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Floral Design
Credit: 1.0 **Grade: 10-12**
PEIMS # 13001800 **Course # 9220**

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

Instrumental Ensemble: Brass I, II, III, and IV **Credit: 1.0**
PEIMS: 03151700, 03151800, 03151900, 03152000
Local Code: 8240, 8250, 8260, 8270
Prerequisite: Brass I- application; Brass II- application and Brass I; Brass III- application, Brass I, and Brass II; Brass IV- application, Brass I, Brass II, and Brass III
Grade: 9-12
These courses are offered to the student with previous brass experience. Concentration will be on the development of individual student skills with experiences in small group participation and the development of knowledge of brass literature.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Instrumental Ensemble: Percussion I, II, III, and IV **Credit: 1.0**
PEIMS: 03151700, 03151800, 03151900, 03152000
Local Code: 8240, 8250, 8260, 8270
Prerequisite: Percussion I- application; Percussion II- application and Percussion I; Percussion III- application, Percussion I, and Percussion II; Percussion IV- application, Percussion I, Percussion II, and Percussion III
Grade: 9-12
These courses are offered to the student with previous percussion experience. Concentration will be on the development of individual student skills with experiences in small group participation and the development of knowledge of percussion literature.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Instrumental Ensemble: Woodwind I, II, III, and IV **Credit: 1.0**
PEIMS: 03151700, 03151800, 03151900, 03152000
Local Code: 8240, 8250, 8260, 8270
Prerequisite: Woodwind I- application; Woodwind II- application and Woodwind I; Woodwind III- application, Percussion I, and Woodwind II; Woodwind IV- application, Woodwind I, Woodwind II, and Woodwind III
Grade: 9-12
These courses are offered to the student with previous woodwind experience. Concentration will be on the development of individual student skills with experiences in small group participation and the development of knowledge of woodwind literature.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Choral Music I, II, III and IV **Credit 1.0**
PEIMS: 03150900, 03151000, 03151100, 03151200
Local Codes: 8010, 8020, 8030, 8040, 8015, 8025, 8035, 8045
Grade: 9-12
This is a beginning course in vocal development with emphasis on musical understanding and musical literacy through disciplined study and performance. Students are required to attend after school and evening rehearsals as necessary to prepare for concerts and competitions and to satisfy the performance TEKS. Fees include the cost for selected uniform(s) for the year, repair or replacement value of lost or damaged property, and uniform cleaning.

This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Advanced Choral Music I, II, III and IV **Credit 1.0**
PEIMS: 03150900, 03151000, 03151100, 03151200
Local Codes: 8050, 8060, 8070, 8080, 8055, 8065, 8075, 8085
Prerequisite: Audition and application
Grade: 9-12
This is an intermediate to advanced course in vocal development with emphasis on musical understanding and musical literacy through disciplined study and performance. All students in this ensemble are required to compete in TMEA Choir auditions and are required to attend after-school and evening rehearsals as necessary to prepare for concerts and competitions and to satisfy performance TEKS. Fees include the cost for selected uniform(s) for the year, repair or replacement value of lost or damaged property, and uniform cleaning.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Choral Ensemble I, II, III, and IV **Credit: 1.0**
PEIMS: 03152100, 03152220, 03152300, 03152400
Local Code: 7350, 7360, 7370
Prerequisite: Application
All students in the Choral Ensemble are required to be enrolled in Advanced Choral Music. This is an advanced choral ensemble in which the main goal is to develop advanced singing skills through both small group performances and competitions. All students in the ensemble are required to compete in TMEA Choir auditions and U.I.L. Solos & Ensemble competition. All students in this ensemble are required to attend after school and evening rehearsals as necessary to prepare for concerts and competitions and to satisfy performance TEKS. Fees include the cost for selected uniform(s) for the year, repair or replacement value of lost or damaged property, and uniform cleaning.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Theatre Arts I **Credit: 1.0**
PEIMS: 03250100
Local Code: 8150
This is an introductory performance course incorporating basic acting techniques, the role of the actor in interpreting dramatic literature, and the introduction of the Theatre student to competitive drama events such as U.I.L. one act play, duet and duo acting, dramatic interpretation, and humorous interpretation. All students in this class will act and learn how to interpret prose and poetry. Students will be required to memorize lines in this class. The students will be required to participate in the production of a one act play in the intramural one act play contest during the second semester where they will either act or serve as crew for the show, which will help them gain knowledge of technical Theatre.

Theatre Arts II, III, and IV **Credit: 1.0**
PEIMS: 03250200, 03250300, 03250400
Local Code: 8160, 8170, 8180
Prerequisite: Theatre Arts II- application and Theatre Arts I; Theatre Arts III- application and Theatre Arts II; Theatre Arts IV- application and Theatre Arts III
Grade: 9-12
The primary aim of this advanced theatre course is to develop advanced acting skills through performance. All students in advanced theatre courses are required to participate in TFA, U.I.L., and NSDA tournaments as part of their grade. Theatre II students will be **required** to attend all local contests while Theatre Arts III and IV students **must attend** local and out of town tournaments. Other activities of these students include a fall play or musical, Follies production, and U.I.L. One Act play. Fees include costs for tournament entries and costume rental or purchase for given shows. After school time is required.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Technical Theatre I **Credit: 1.0**
PEIMS: 03250500
Local Code: 8100
Grade: 9-12
The student enrolled in Technical Theatre I is required to attend various types of live production (plays and concerts). This course is an introduction to stagecraft and its various elements. Areas of study include scenic design, properties, stage lighting design, sound design, make-up/costume design, and publicity with an emphasis on scenic construction. Students are also required to complete several hours by assisting in the shop for departmental productions. A student may work on school related production as a member of the backstage crew. After school time is required.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Technical Theatre II, III, and IV **Credit: 1.0**
PEIMS: 03250600, 03251100, 0351200
Local Code: 8110, 8120, 8130
Grade: 9-12
Prerequisite: Previous Level Technical Theatre Class
The student enrolled in an Advanced Technical Theatre course is required to attend various types of live productions, work on a school related production as a crewmember, and complete technical theatre projects in the course areas of study. Areas of study include scenic design, properties, stage lighting design, sound design, make-up/costume design, and publicity with an emphasis on scenic construction. Students will be expected to assist with production in order to receive credit. Assessment is based on a practical application during class periods and after schoolwork calls. After school time is required.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Theatre Production I, II, III, and IV **Credit: 1.0**
PEIMS: 03250700, 03250800, 03250900, 03251000
Local Code: 8490, 8500, 8510, 8520
Grade: 9-12
Prerequisite: Application for levels II, III, and IV; cast/crew fall show and/or UIL One Act play; Theatre Production II-Theatre Production I, Theatre Production III-Theatre Production II; Theatre Production IV – Theatre Production I, Theatre Production II, Theatre Production III
This class will be offered to students who are in a production after school or with teacher approval on production work during the day. In order to develop his/her acting skills and concepts, the student shall be provided opportunities to audition, rehearse, and perform in public in either the fall or spring production. Advanced students will direct a Theatre l production for the intramural one act play competition. To develop their production skills and concepts, technical theatre students will be provided opportunities to do research and design and work on technical crews for a production. Assessment is based on a practical application during class periods and after schoolwork calls. After school time is required.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Health and Physical Education

The District shall not award state graduation credit in physical education for private or commercially sponsored physical activity programs conducted either on or off campus (see Board Policy EIF Local).

Lifetime Recreation and Outdoor Pursuits **Credit: 1**
PEIMS: PES00053
Local Code: 5120
Grade: 9-12
The Lifetime Recreation and Outdoor Pursuits course provides opportunities for students to develop competency in five or more lifelong recreational and outdoor pursuits for enjoyment and challenge. Students in Lifetime Recreation and Outdoor Pursuits participate in activities that promote physical literacy, respect for and connection to nature and the environment, and opportunities for enjoyment for a lifetime. Students will experience opportunities that enhance self-worth and support community engagement.

Lifetime Fitness and Wellness Pursuits **Credit: 1**
PEIMS: PES00051
Local Code: 5100
Grade: 9-12
The Lifetime Fitness and Wellness Pursuits course offers current approaches for the foundation of personal fitness, physical literacy, lifetime wellness, and healthy living. Students in Lifetime Fitness and Wellness Pursuits will apply the knowledge and skills to demonstrate mastery of the concepts needed to achieve lifetime wellness. Students will participate in a variety of physical activities for attaining personal fitness and lifetime wellness.

Athletics **Credit: 0.5-1.0**

PEIMS: PES00000, PES00001, PES00002, PES00003

Local Code: See Below

Grade: 9-12

Prerequisite: Freshman - participation in Middle School or approval by the head coach; grades 10-12- previous participation in High School and head coach approval

Athletics is a course based on competitive sports under the guidelines of U.I.L. and TEA regarding no pass/no play. The chart below indicates the competitive sports that are included in high school athletics. These are co-curricular classes and will have a grade based on outside participation in addition to classroom work.

Year	Football	Volleyball	Basketball- Boys	Basketball- Girls
1	5301	5501	5471	5491
2	5302	5502	5472	5492
3	5303	5503	5473	5493
4	5304	5504	5474	5494
	Soccer- Boys	Soccer- Girls	Baseball	Softball
1	5511	5521	5431	5461
2	5512	5522	5432	5462
3	5513	5523	5433	5463
4	5514	5524	5434	5464
	Cross Country	Golf	Swimming	Tennis
1	5441	5401	5481	5451
2	5442	5402	5482	5452
3	5443	5403	5483	5453
4	5444	5404	5484	5454
	ROTC	Girls Track	Cheer	
1	5540	5331	5531	
2	5550	5332	5532	
3	5560	5333	5533	
4	5570	5334	5534	

Cheerleading **Credit: 0.5-1.0**

PEIMS: PES00000, PES00001, PES00002, PES00003

Local Code: Grade 9 (5531, 5532), Grade 10 (5533, 5534), Grade 11 (5530)

Grade: 9-12

Prerequisite: Qualifying for the Cheerleading Squad

This course is required for students qualifying for the cheerleading squad. Students must remain eligible to participate. NOTE: The state allows four credits of physical education or equivalent to be counted towards state graduation requirements. Any additional earned credit earned in physical education is local credit. The state allows two semesters of fall Cheerleading to substitute as one semester of physical education.

Dance I, II, III, and IV **Credit: 0.5-1.0**
PEIMS: 03833300, 03833400, 03833500, 03833600
Local Code: 8091, 8092, 8093, 8094
Dance students develop perceptual thinking and movement abilities in daily life, promoting an understanding of themselves and others. Students develop movement principles and technical skills and explore choreographic and performance qualities. Students develop self-discipline and healthy bodies that move expressively, efficiently, and safely through space and time with a sensitive kinesthetic awareness. Students recognize dance as a vehicle for understanding historical and cultural relevance, increasing an awareness of heritage and traditions of their own and others, and enabling them to participate in a diverse society. Evaluating and analyzing dance allows students to strengthen decision-making skills, develop critical and creative thinking, and develop artistic and creative processes. Students continue to explore technology and its application to dance and movement, enabling them to make informed decisions about dance.

Note: Students may take Dance for Physical Education Credit with the following conditions:
Students must have earned their 1 required credit of Fine Arts before they can use Dance as a Physical Education credit. Students may only receive Fine Arts or Physical Education credit for the course, but not at the same time.

NJROTC I, II, III, and IV (Naval Science) **Credit: 1.0**
PEIMS: PES00004, 03160200, 03160300, 03160400
Local Code: 5540, 5550, 5560, 5570
Grade: 9-12
Naval Science is a multi-disciplinary course that includes: an introduction to the NJROTC program and leadership, Naval Ships and Damage Control, the Nation, the Navy, and the People, Sea Power and Maritime Geography, Oceanography, Naval history through 1860, Introduction to Navigation and Time, Basic Seamanship, and First Aid and Health Education. Physical training and wearing of the NJROTC uniform on specified days are mandatory.
NOTE: Classes meet in Aransas Pass. Transportation is provided from GPHS before school, for the 5th period class, and during 7th period. If students intend to stay after school for events, students will need to arrange their own transportation.

Languages Other Than English

Spanish I **Credit 1.0**
PEIMS: 03440100
Local Code: 6110
Grade: 9-12
TEA Prerequisite: None
In this course, students will learn the foundation for Spanish pronunciation and standard grammar, engage in oral, aural, and written exchanges of learned materials, acquire basic vocabulary skills (such as likes, dislikes, chores, and sports), read short excerpts of materials, learn the present tense of regular and irregular verbs, give commands to peer as well as adults, and compare the Spanish language and Hispanic culture to student's own language and culture.

Spanish II **Credit 1.0**
PEIMS: 03440200
Local Code: 6120
Grade: 9-12
TEA Prerequisite: Spanish I
In this course, students will review and build on Spanish I concepts and will continue to develop oral, aural, writing, and reading skills, build up vocabulary repertoire, review present tense verbs, learn how to communicate in the past and future tenses, review regular commands and learn irregular commands, and compare the Spanish language and Hispanic culture to student's own language and culture.

Spanish II Advanced **Credit 1.0**
PEIMS: 03440200
Local Code: 6150
Grade: 9-12
TEA Prerequisite: Spanish I
Weighted GPA Course
This is an academically challenging college preparatory course. In this course, students will review and build on Spanish I concepts and will continue to develop oral, aural, writing, and reading skills, build up vocabulary repertoire, review present tense, learn how to communicate in the past and future tenses, read selected prose works from Peninsular and American authors, and compare the Spanish language and Hispanic culture to student's own language and culture. Students are expected to use as much Spanish in class as possible (a minimum of 85% expected in Spanish II Advanced).

Spanish III **Credit 1.0**
PEIMS: 03440300
Local Code: 6130
Grade: 9-12
TEA Prerequisite: Spanish I and II
This course extends language applications acquired in the second year. Students will review extensively and practice grammar, vocabulary, and communication skills. Emphasis is placed on role-playing and speaking in everyday situations using standard Spanish language. Students will expand their knowledge of writing and reading selected passes of literature in the target language.

Spanish III Advanced **Credit 1.0**
PEIMS: 03440300
Local Code: 6140
Grade: 9-12
Prerequisite: Spanish I and II
Weighted GPA Course
This is an academically challenging college preparatory course in which students review, practice, and apply the concepts acquired in the first two years. They will incorporate additional grammar, introduce the subjunctive mood, and improve their communication skills through continued application of more advanced techniques and concepts. They will also be introduced to Spanish history and literature and begin composing essays in the target language. The second semester of this course will be conducted in Spanish 85% of the time. This course is designed to challenge the student who has a strong interest and ability in the study of Spanish.

Spanish Language and Culture AP (Spanish IV AP) **Credit 1.0**
PEIMS: A3440100
Local Code: 6170
Grade: 9-12
Prerequisite: Spanish I-III
Weighted GPA Course
This course is a college-level course, which will be conducted 90% of the time in Spanish. Students will continue to develop language skills (reading, writing, listening, and speaking) that can be used in various activities and disciplines to further enhance the acquisition of Spanish. It will stress understanding the written and spoken language and responding in standard Spanish. Extensive training in the organization and writing of compositions will be emphasized. Students will also read and discuss selections of literature in the target language.

Computer Science I **Credit: 1.0**
PEIMS #03580200
Local Code: 7040
Grade: 10-12
TEA Prerequisite: None
Computer Science I is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, recursion, and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue onto Computer Science II. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

Computer Science II **Credit: 1.0**
PEIMS: 03580300
Local Code: 7041
Grade: 11-12
TEA Prerequisite: Computer Science I
Computer Science II will foster students' creativity and innovation by presenting 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 the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science 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 gain an understanding of computer science through the study of technology operations, systems, and concepts. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

Innovative Courses

School to College **Credit 0.5**
PEIMS: N1130029
Local Code: 0500
Grade: 9-12
Prerequisite: Committee Determination
School to College is an in-depth course on postsecondary readiness to develop knowledge and skills in 5 areas: career planning, postsecondary institution analysis, financial planning and literacy, outcomes-based postsecondary institution selection, and TSIA preparation. The purpose of the course is to prepare students for dual credit opportunities.

Social Emotional Academic Success (Methodology of Academic & Personal Success) **Credit 1.0**
PEIMS: N1130021
Local Code: 9900
Grade: 9-12
Prerequisite: Committee Determination
This course focuses on the skills and strategies necessary for students to make a successful transition into high school and an academic career. Students will explore the options available in high school, higher education, and the professional world in order to establish short and long-term goals. Students will focus on self-understanding, decision-making, resiliency, attitude, character education, and leadership.

Sports Medicine I, II, and III **Credit 1.0**
PEIMS: N1150040
Local Code: 5320
Grade: 9-12
Prerequisite: Athletic Trainer Approval
This course focuses on the study and application of First Aid/CPR/AED, organization and administrative considerations, prevention of injuries, recognition, evaluation, immediate care of injuries, rehabilitation and management skills, taping and wrapping techniques, emergency procedures, nutrition, sports psychology, human anatomy and physiology, therapeutic modalities, and therapeutic exercise.
*This course does not satisfy the physical education requirement for graduation. *

Student to Industry Connection **Credit 1.0**
PEIMS: N1270154
Local Code: 9953
Grade: 9-12
Prerequisite: Committee Determination
The central focus of this adapted course is to prepare students to be 21st century career ready through interaction with a seasoned workplace mentor. The course may include a work-based learning component. Instruction will support students with marketable skills attainment. The course is recommended for students 16 years of age or older. Students with the opportunity to develop professional relationships with experienced individuals within the student's chosen program of study and to demonstrate necessary skills for an online virtual workplace. Students will learn acceptable virtual etiquette and professionalism for a teleworking environment.

General Employability Skills **Credit 1.0**
PEIMS: N1270153

Local Code: 9951
Grade: 9-12
Prerequisite: Committee Determination
This course is adapted and designed to guide students in obtaining the knowledge and the employability skills needed that are transferable among a variety of jobs and careers and are considered essential in any employment situation. Students will learn and apply basic knowledge of what is expected in the workplace.

Local Credits

Community Training I, II, III, and IV **Credit 0.5-1.0**
Local Code: 9935, 9936, 9937, 9938
Prerequisite: Committee Determination
Students will receive hands-on training within the community in preparation for work and life after high school. The course will provide skills of greeting, responding to authority, interpersonal appropriateness, problem-solving, and conflict resolution within situational context. Evidence of mastery will be taken in home, school, job and community settings.

Daily Living Skills I, II, III, and IV **Credit 0.5-1.0**
Local Code: 9940, 9941, 9942, 9943
Prerequisite: Committee Determination
This course is based on alternate academic achievement standards that focus on skills students need in adult life regarding daily routines and schedules, cooking, safety, chores (laundry, cleaning, animal care), duties, responsibilities, budgeting, time management, first aid, communication, transportation, phone, health care, and other adult living skills. Students will develop skills for independence in a home or residential setting.

Employability Skills I, II, III, and IV **Credit 0.5-1.0**
Local Code: 9945, 9946, 9947, 9948
Prerequisite: Committee Determination
The student will focus on learning skills related to filling out a job application, interviewing, ways to locate jobs within a community, locating and using services provided within the community to assist the student in gaining and maintaining full time employment or volunteering. Students will master skills regarding safety, understanding of on-the-job responsibilities, scheduling requirements, on the job relationships, and other on the job skills.

Transition Services I, II, III, and IV **Credit 0.5-1.0**
Local Code: 9955, 9956, 9957, 9958
Prerequisite: Committee Determination
Students will focus on the requirements to transition to a successful career after high school in an area of interest. Students will work on independent skills such as interviewing skills, soft skills practice, practicing self-determination skills, practicing budgeting skills with paying bills and purchasing groceries and exploring transportation options.

Vocational Experience I, II, and III **Credit 0.5-1.0**
Local Code: 9910, 9911, 9912, 9913
Prerequisite: Committee Determination
This course is designed to provide the student with opportunities to learn concepts and skills related to successful employment including organizational skills, clerical skills, effective communication skills, and productive work habits and attitudes. Students may be assigned to the attendance office or the counselors' office. Students must prove capable of maintaining confidentiality of information. Students will be expected to meet course objectives in order to earn a numerical grade, which will not be used in the grade point average computation.

Gregory-Portland ISD

Career and Technical Education

Educate. Inspire. EMPOWER!

Programs of Study and Course Descriptions 2023-2024

What are 'Programs of Study?"

Programs of study are course sequences that prepare students with the knowledge and skills necessary for success in their chosen career. These sequences embed relevant, real world experiences and culminate in a postsecondary credential. Programs of study offered by a Local Education Agency (LEA) must be approved by the Texas Education Agency (TEA) per the Strengthening Career and Technical Education for the 21st Century Act (Perkins V).

Programs of Study & Accountability

Students that are considered to be CTE "concentrators" or "completers" will be included in federal accountability ratings.

- **Concentrator:** A student served by an LEA who has completed two or more courses for at least 2 credits in a single program of study.
- **Completer:** A student served by an LEA who has completed 3 or more courses for 4 or more credits including an advanced course (level 3 or level 4) within an approved program of study.

These definitions will begin being implemented in 2020-2021.

Programs of study **DO NOT** replace endorsements. Programs of study support the completion of an endorsement as identified in this guide.

The 5 Endorsement Offerings at Gregory-Portland High School - *Arranged by Cluster and Program of Study (Updated 10/25/23)*

1. Business & Industry

Agriculture, Food, and Natural Resources
Principles of Ag, Food, and Natural Resources
Small Animal Management / Equine Science
Livestock Production
Veterinary Medical Applications**
Wildlife, Fisheries, and Ecology Mgmt
Landscape Design/Turf Grass Mgmt
Horticulture
Floral Design
Advanced Plant and Soil Science
Advanced Animal Science
Ag Mechanics

Automotive
BIM
Autotech I, II
Career Prep

Journalism
Photojournalism
Journalism
Newspaper I, II, III
Yearbook I, II, III

5. Multidisciplinary
4 credits in any endorsement area or
4 credits in each core subject area or
4 credits in AP or Dual Credit courses
**Speak to your counselor for more information

Business, Marketing, and Finance
Principles of Bus, Mkt. Finance
BIM I
BIM II
Accounting I
Accounting II
Entrepreneurship
Practicum in Bus Mgmt
Career Prep I/II

Arts, A/V, Tech, and Communications
Principles of Art, A/V Tech, and Comm
Professional Communications
Digital Media
Animation I
Fashion Design I, II
A/V Production I, II
Practicum in A/V Production
Career Prep I/II

Hospitality and Tourism
Principles of Hospitality & Tourism
Introduction to Culinary Arts
Culinary Arts
Advanced Culinary Arts
Practicum in Culinary Arts

Information Technology
Principles of Information Technology
Computer Science I
Web Design
Project Based Research
Career Prep

Manufacturing
Intro to Welding
Welding I, II, III
Welding Safety
Principles of Applied Engineering
Robotics I, II
Engineering Design & Prob Solving
Practicum in Manufacturing

Architecture and Construction
Intro to Technical Drafting
Intermediate Computer-Aided Drafting

Refining and Chemical Processes
Intro to Process Technology
Petrochemical Safety, Health and Environment

2. Public Service

Health Science
Principles of Health Science
Medical Terminology
Health Science Theory
Anatomy and Physiology
Practicum in Health Science
Medical Assistant

ROTC @ Aransas Pass
ROTC I, II, III, IV

Human Services
Principles of Human Services
Lifetime Nutrition and Wellness
Interpersonal Studies
Professional Communications
Practicum in Human Services

Cosmetology
Cosmetology I DC
Cosmetology II DC
Cosmetology III DC

Law, Public Safety, and Security
Principles of Law DC
Firefighter I DC
Practicum in Health Science EMT
Firefighter II DC
Forensic Science

Education and Training
Principles of Education and Training
Child Development
Instructional Practices
Practicum in Education and Training

4. Arts & Humanities

Music
Band I, II, III, IV
Ensemble 1, II, III, IV
Choir 1, II, III, IV

Theatre
Theatre Arts I, II, III, IV
Tech Theatre I, II, III, IV
Theatre Prod I, II, III, IV

Visual
Art I
Drawing II, III, IV
Paint II, III, IV
Comp Art II, III, IV
AP Art I / II, III

Humanities
English I / English I PAP
English II /English II PAP
English III / AP English III
English IV/ AP English IV
Creative Writing
Additional English Course

Humanities Social Studies
W. Geography
W. History
U. S. History
Gov/Eco
Psych/Soc
Additional Social Studies Elective

Humanities Language
Spanish I, II, III
Spanish II Adv
Spanish III Adv
Spanish AP

3. STEM

Science
Biology and AP Biology
Chemistry and AP Chemistry
AP Environ. Science
Environmental Systems
Physics and AP Physics I, II
AP Physics C Elec/Mag
AP C Mechanics
Anatomy and Physiology
Scientific Research and Des.
Adv Animal Science
Adv Plant and Soil Science
Eng. Des & Prob Solving (Robotics III)
Forensic Science

Math
Algebra I, II
Geometry
Precalculus
AP Calculus AB, BC
AP Statistics
DC College Algebra, Trigonometry, Calculus
Robotics II

Computer Science
Fundamentals of Computer Science
Computer Science I, II, III
Game Programming and Design
Independent Study in Tech Apps

Engineering
*Principles of Applied Engineering
*Robotics I
*Engineering DES SLV ROB
*Practicum in Manufacturing - Robotics (2 period class)
*Scientific Research and Design

*Students in the Advanced Manufacturing and Machining (Robotics) Program of Study can meet the Business and Industry Endorsement and/or the STEM endorsement depending on math and science courses taken.

Academic and Career and Technical Dual Credit / Continuing Education Programs – Del Mar College

This section includes an overview of each program offered through our partnership with Del Mar College. For detailed course sequences see the specific program of study chart in the next section.

Certificates Offered:

***EKG**	***Intermediate WELDING CERTIFICATE LEVEL 1**
***PHLEBOTOMY**	***NCEER (Information under WELDING)**
***Patient Care Tech (PCT)**	***Basic Fire Fighter Level II Certificate**
***Certified Nurses Aid (CNA)**	***EMT Basic Plan**
***Cosmetology Level 1 Certificate**	***Automotive Suspension, Driveline, Brake Specialist Certificate Level I**

Core Classes

G-P HS offers many dual credit courses through our partnership with Del Mar College. Most of our dual credit students are able to get their core classes (or basics) completed before graduating high school. You will need to check with the university/college you are interested in attending for their specific core requirements. To check transferability by course use the following link www.tccns.org. See each academic subject area section of this course guide for specific offerings.

Health Science

We currently have 4 health science certifications available: 1) Phlebotomy, 2)EKG, 3) PCT (Patient Care Tech), and 4) CNA (Certified Nursing Aid) In order to receive the certifications in each of the areas above the student will be able to take the certification test after they successfully complete the Continuing ED class for that particular certification. These classes are taught by Del Mar instructors on the GPHS campus. Once a student passes the class AND the certification test for that area they will receive the certification. These certifications allow students to gain employment in the healthcare industry.

NEW FOR CLASS OF 2026 AND BEYOND – P-TECH HEALTH SCIENCE PROGRAM
(See P-TECH section at the back of the course guide)*

Welding

Students can also earn a Level 1 certificate (TSI exempt) in Intermediate Welding. Students will take a series of welding classes that are taught by Del Mar instructors on the GPHS campus. Once they have successfully passed all of the classes needed they will be able to walk the stage at Del Mar College for this certificate. Be sure to get with your counselor to start taking the necessary classes as early as 9th grade.

Auto Tech

Students can earn an Automotive Suspension, Driveline, Brake Specialist Certificate which is a Level 1 certificate and TSI exempt. Students will take a series of automotive dual credit classes along with a dual credit math course and speech. Once they successfully complete the required credits they will be able to walk the stage at Del Mar College for this certificate! Students can start taking these courses as early as the 10th grade! Please get with your academic counselor to start taking the required courses. The student must apply to Del Mar College and complete all college requirements.

Cosmetology

Students can also earn a Level 1 certificate (TSI exempt) in Cosmetology. Students will take a series of cosmetology classes that are taught by Del Mar instructors on the Del Mar West campus. Most of the classes are taken during the Fall and Spring semesters but there are some Summer courses required. GPISD will pay for the Fall and Spring classes but not the Summer classes. Once they have successfully passed all of the classes needed they will be able to walk the stage at Del Mar College for this certificate. There is additional state testing and courses required in order to receive a cosmetology license. Be sure to get with your counselor to start taking the necessary classes as early as 10th grade.

EMT (Emergency Medical Technician)

Students can also earn an EMT BASIC Plan Certificate through the Del Mar program. Students will take a series of two classes (EMSP 1401 and EMSP 1160) that are taught by Del Mar instructors on the Del Mar West campus in the SPRING only. There are clinical hours required for this certificate. Once they have successfully passed all of the classes needed and completed clinical hours they will take the Emergency Medical Technician exam. If they pass both the classes and the exam and are at least 18 years old they will be a Certified EMT Technician. TSI levels of R3 E3 M2 are required for this program. Be sure to get with your counselor to start taking the necessary classes as early as 11th grade.

Fire Science

Students can also earn a Basic Fire Fighter Level II certificate from the Fire Science program. Students will take a series of FIRE classes that are taught by Del Mar instructors on the Del Mar West campus. There will be clinical hours required for the certificate as well. The Fire Science Dept requires the student to complete the Fall, Spring, and Summer semesters in order within the year. Once they have successfully passed all of the classes needed they will be able to walk the stage at Del Mar College for this certificate. TSI levels of R 3, E2, M1 are required for this program. Be sure to get with your counselor to start taking the necessary classes as early as 11th grade.

Additional Programs (no certificate during high school)

GPISD offers other dual credit classes on campus that can help a student get an early start on various programs.

Process Technology PTAC

Process Tech classes that are taught by a Del Mar instructor on the GPHS campus. Students can start the PTAC classwork as early as 11th grade. They can take classes towards earning a Process Technology certificate or Associates degree. Usually the students who start their Junior year only need about 1 year to complete the certificate and a little less than 2 years for the associates. Students are required to complete a Del Mar College application and meet their other requirements. There are no TSI levels needed if they plan on pursuing the Level 1 Certificate. Please get with your counselor to start taking these courses.

Engineering

GPHS does have two Engineering Dual Credit courses for students. These courses do not easily transfer to other colleges but they are helpful in that students are learning the basics of engineering which can help them once they attend the university of their choice. The courses available are ENGR 1201 and ENGR 1304. These courses are taught by a Del Mar instructor on the GPHS campus. Students can start this program in 11th grade. In order to register for Engineering courses the student must have successfully passed high school Pre-Calculus or is taking the course concurrently. There is a TSI requirement of R3 E2 M2. Students are required to complete a Del Mar College application and meet their other requirements. Please see your counselor to start taking the classes and to get your paperwork started for the Del Mar.

Agriculture, Food, and Natural Resources

COURSES

LEVEL 1
Principles of Agriculture, Food, and Natural Resources

LEVEL 2
Small Animal Management
Equine Science

LEVEL 3
Livestock Production

LEVEL 4
Veterinary Medical Applications
Advanced Animal Science

STSECONDARY OPTIONS

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

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
Animal Breeders	$39,135	28	9%
Animal Scientists	$57,533	22	12%
Medical Scientists	$63,898	435	27%
Veterinarians	$93,496	294	24%
Zoologists and Wildlife Biologists	$67,309	45	32%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Texas FFA

Work Based Learning Activities:
Agri-Science Fair
4H
Volunteer at a local farm or veterinary office

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 outdoor area harboring animal life. Students may also research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster® focuses on the essential elements of life—food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

Successful completion of the Animal Science program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019

Principles of Agriculture Food and Natural Resources

Credit: 1 **Grade: 9-12**
PEIMS # 13000200 **Course # 9141**

Prerequisite: none

Principles of Agriculture, Food, and Natural Resources will give students an overview of the Agriculture industry. Students will also learn about the FFA organization and be given the opportunity to participate in leadership and career development events. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Small Animal Management

Credit: .5 **Grade: 10-12**
PEIMS # 13000400 **Course # 9115**

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings.

Equine Science

Credit: .5 **Grade: 10-12**
PEIMS # 13000500 **Course # 9242**

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Livestock Production

Credit: 1 **Grade: 9-12**
PEIMS # 13000300 **Course # LIVESP**

Recommended Prerequisite: Principles of Agriculture Food and Natural Resources

In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. We discuss beef cattle, dairy cattle, swine, sheep, goats, poultry, and what goes into each of those industries. If you are interested in a career in agricultural business, animal production, veterinary science, or anything in the animal science fields, this is a great class to take!

Veterinary Medical Applications

Credit: 1 **Grade 11-12**
PEIMS: #13000600 **Course # 9150**

Veterinary Medical Applications covers topics relating to veterinary practices, including practices for large and small animal species. To prepare for careers in the field of animal science, students must attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings.

Advanced Animal Science

Credit: 1 **Grade: 11-12**

PEIMS # 13000700 **# 9116**

Prerequisite: Biology and Chemistry/IPC, Algebra I, Geometry, Small Animal Management, Equine Science or Livestock Production, Principles of Agriculture, Food, and Natural Resources

Students who want to learn the scientific and technological aspect of animal science through laboratory experiences should select this course. These investigations will involve actively obtaining and analyzing data with physical equipment and may also involve experimentation in a simulated environment with field observations that extend beyond the classroom.

Agriculture, Food, and Natural Resources

COURSES

LEVEL 1

Principles of Agriculture, Food, and Natural Resources

LEVEL 2

Wildlife, Fisheries, and Ecology Management/Lab

LEVEL 3

Practicum in Agriculture

LEVEL 4

POSTSECONDARY OPTIONS

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

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

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Attend summer leadership events
Texas FFA

Work Based Learning Activities:
Intern at a waste treatment plant

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

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster® focuses on the essential elements of life—food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Successful completion of the Environmental and Natural Resources program of study will fulfill requirements of a Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Principles of Agriculture Food and Natural Resources

Credit: 1 **Grade: 9-12**
PEIMS # 13000200 **Course # 9141**

Prerequisite: none

Principles of Agriculture, Food, and Natural Resources will give students an overview of the Agriculture industry. Students will also learn about the FFA organization and be given the opportunity to participate in leadership and career development events. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Wildlife, Fisheries, and Ecology Management

Credit: 1 **Grade: 9-12**
PEIMS # 13001500 **Course # 9118**

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

If you would like to work outdoors and help wildlife and ecology, this course would help meet those goals. Wildlife, Fisheries, and Ecology Management examines the management of game and non-game wildlife species, fish, and aqua crops and their ecological needs as related to current agricultural practices. To prepare for careers in natural resource systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to natural resources, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Practicum in Agriculture

Credit: 2 **Grade: 11-12**
PEIMS # 13002500 **Course # 9142**

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

This course is recommended for students in Grades 11 and 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Career Cluster. 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.

Agriculture, Food, and Natural Resources

COURSES

LEVEL 1
Principles of Agriculture, Food, and Natural Resources

LEVEL 2
Landscape Design / Turf Grass Management

LEVEL 3
Horticulture
Floral Design**

LEVEL 4
Advanced Plant and Soil Science

***Pending Board Approval*

POSTSECONDARY OPTIONS

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

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
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%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Texas FFA

Work Based Learning Activities:
Work part-time at a florist;
start or work for a local landscaping business

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.

Successful completion of the Plant Science program of study will fulfill requirements of a Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019

Principles of Agriculture Food and Natural Resources

Credit: 1 **Grade: 9-12**
PEIMS # 13000200 **Course # 9141**

Prerequisite: none

Principles of Agriculture, Food, and Natural Resources will give students an overview of the Agriculture industry. Students will also learn about the FFA organization and be given the opportunity to participate in leadership and career development events. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Landscape Design and Management

Credit: .5 **Grade: 10-12**
PEIMS # 13001900 **Course # 9210**

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

This course would be useful in managing industry and home lawns as well as golf courses. You will need to develop an understanding of landscape techniques and practices if this is the direction you are considering.

Turf Grass Management

Credit: .5 **Grade: 10-12**
PEIMS # 13001950 **Course # 9220**

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

Turf Grass Management is designed to develop an understanding of turf grass management techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills and technologies in a variety of settings.

Floral Design

Credit: 1.0 **Grade: 10-12**
PEIMS # 13001800 **Course # 9120**

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

Horticulture Science

Credit: 1 **Grade: 10-12**

PEIMS # 13002000 **Course # 9232**

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources, Biology

If you like learning about plants and working with your hands to see fast results, this course should be considered. This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production.

Advanced Plant and Soil Science

Credit: 1 **Grade: 11-12**

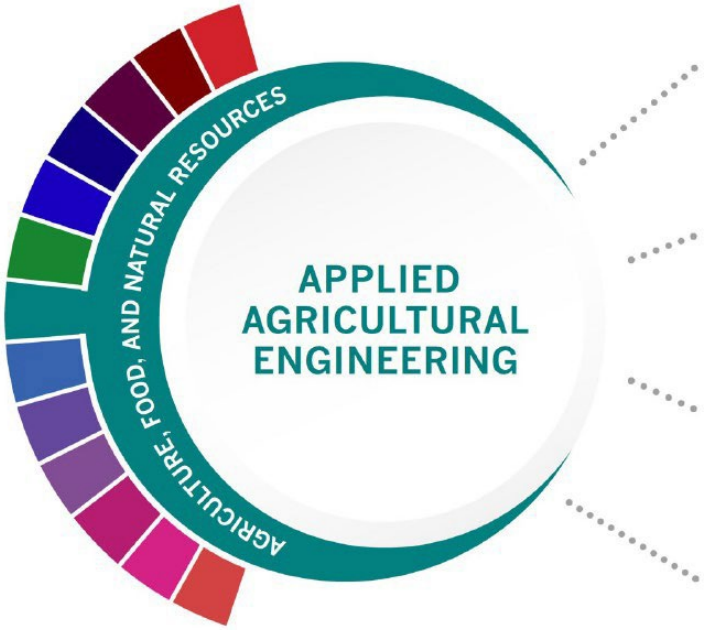
PEIMS # 13002100 **Course # 9160**

Recommended Prerequisites: Biology, IPC, Chemistry, or Physics; Principles of Agriculture, Food, and Natural Resources, Horticulture Science

Learn about the natural world and how plant and soil science has influenced a vast body of knowledge with applications still to be discovered. Prepare for careers in the food and fiber industry.

Agriculture, Food, and Natural Resources

***New Courses Pending Board Approval*



Level 1	Principles of Agriculture, Natural Resources
Level 2	Agricultural Mechanics and Metal Technologies/Lab**
Level 3	Agricultural Structures Design and Fabrications / Agricultural Facilities Design and Fabrication **
Level 4	Practicum in Agriculture, Food, and Natural Resources

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S / DOCTORAL PROFESSIONAL DEGREE
OSHA 30 Hour General Industry	Certified Professional Agronomy	Heavy Equipment Maintenance Technology/ Technician	Agricultural Engineering	Agricultural Engineering
Feed yard Technician in Machinery, Operation, Repair and Maintenance	Certified Reliability Engineer	Agricultural Mechanization General	Agricultural General	Agricultural General
AWS SENSE Welding Level 1	Certified Irrigation Designer	Small Engine Mechanics and Repair Technology/ Technician		

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

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

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

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life—food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

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.

Principles of Agriculture Food and Natural Resources

Credit: 1 **Grade: 9-12**
PEIMS # 13000200 **Course # 9141**
Prerequisite: none
Principles of Agriculture, Food, and Natural Resources will give students an overview of the Agriculture industry. Students will also learn about the FFA organization and be given the opportunity to participate in leadership and career development events. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Agricultural Mechanics and Metal Technologies

Credit: 1.0
Local Code TBD
PEIMS: 13002200
Grades: 10-12

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

Agricultural Structures and Equipment Design and Fabrication

Credit: 1.0 / 1.0
Local Code TBD
PEIMS: 13002300 / 13002350

In Agricultural Structures Design and 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.

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. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

Arts, A/V Technology, and Communications

COURSES

LEVEL 1 — Principles of Arts, A/V Technology & Communications

LEVEL 2 — Digital Media

LEVEL 3 — Animation I

LEVEL 4 — Career Prep

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

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
Graphic Designers	$44,824	1,433	15%
Multimedia Artists and Animators	$67,392	186	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Join a website development or coding club.
SkillsUSA, TSA

Work Based Learning Activities:
Intern with a multimedia or animation studio.
Obtain a certificate in graphic design.

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

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

Successful completion of the Graphic Design & Multimedia Arts program of study will fulfill requirements of a Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Principles of Arts, Audio/Visual Technology, and Communication (1st Level AV)

Credit: 1 **Grade: 9-12**
PEIMS # 13008200 **Course # 8530**

Prerequisite: none

In this course, students will be introduced to the various and multifaceted career opportunities in the Arts, Audio/Video Technology, and Communications cluster and the knowledge, skills, and educational requirements for those opportunities. G-P's video program is a professional-oriented career training set of instruction. The students who follow this course plan have been recognized on a national level. Video production is not only instructional and analytical but also artistic.

Digital Media

Credit: 1 **Grade: 9-12**
PEIMS # 13027800 **Course # 7035**

Prerequisite: none

Through the study of digital media, students will analyze and assess current and emerging technologies while designing and creating multimedia projects. The software programs used for design and creation are Photoshop, Windows MovieMaker, and other emerging applications. The knowledge and skills used for design and creation will enable students to successfully perform and interact in a technology-driven society.

Animation I

Credit: 1 **Grade: 10-12**
PEIMS # 13008300 **Course # 8535**

Prerequisite (recommended): Art I or Principles of Art, Audio/Video Technology and Communications

Learn Adobe Flash to add animation, video, and interactivity to web pages. Utilize the techniques used in the animation industry including animating still images and text and import video.

Career Preparation I

Credit: 2 **Grade: 11-12**
PEIMS # 12701300 **Course # 9080**

Prerequisite: at least 16 years of age

This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one-hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required.

Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher.

This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Arts, A/V Technology, and Communications

COURSES

LEVEL 1 Principles of Arts, A/V Technology & Communications

LEVEL 2 Fashion Design I

LEVEL 3 Fashion Design II

LEVEL 4 Career Prep

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

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
Graphic Designers	$44,824	1,433	15%
Multimedia Artists and Animators	$67,392	186	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Join a website development or coding club.
SkillsUSA, TSA

Work Based Learning Activities:
Intern with a multimedia or animation studio.
Obtain a certificate in graphic design.

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

Successful completion of the Graphic Design & Multimedia Arts program of study will fulfill requirements of a Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Principles of Arts, Audio/Visual Technology, and Communication (Fashion)

Credit: 1 **Grade: 9-12**
PEIMS # 13008200 **Course # 8530**

Prerequisite: none

In this course, students will be introduced to the various and multifaceted career opportunities in the Arts, Audio/Video Technology, and Communications cluster and the knowledge, skills, and educational requirements for those opportunities. G-P's video program is a professional-oriented career training set of instruction. The students who follow this course plan have been recognized on a national level. Video production is not only instructional and analytical but also artistic.

Fashion Design I

Credit: 1 **Grade: 10-12**
PEIMS # 13009300 **Course # 8575**

Prerequisite: none

Students in the Fashion and Design I class will develop an understanding of the fashion industry with an emphasis on design and construction. In the course, students will compare current styles as well as the history of fashion and textiles. Students will also be given the opportunity to create as they develop beginning sewing and embroidery skills. An important part of the course will be learning how to professionally present and market goods while demonstrating positive work behaviors and personal qualities needed to be employable.

Fashion Design II

Credit: 1 **Grade: 11-12**
PEIMS # 13009400 **Course # 8576**

Prerequisite: Fashion Design I

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

Career Preparation I

Credit: 2 **Grade: 11-12**
PEIMS # 12701300 **Course # 9080**

Prerequisite: at least 16 years of age

This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one-hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required.

Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher.

This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Arts, A/V Technology, and Communications

COURSES

LEVEL 1
Principles of Arts, A/V Technology, and Communications
Professional Communications

LEVEL 2
Audio/Video Production

LEVEL 3
Audio Video Production II

LEVEL 4
Practicum of Audio/Video Production

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Apple Final Cut Pro X	Certified Video Engineer	Recording Arts Technology/Technician		Communications Technology/ Technician
Apple Logic Pro X	Commercial Audio Technician	Cinematography and Film/ Video Production		
Adobe Certified Associate Premiere Pro	Certified AM Directional Specialist	Radio and Television Broadcasting Technology/ Technician	Radio and Television	
Adobe Certified Associate Certifications	Certified Broadcast Radio Engineer	Music Technology	Agricultural Communication/ Journalism	

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
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 andVideo Editors	$47,382	118	23%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Shadow a production team
SkillsUSA, TSA

Work Based Learning Activities:
Intern at a local television station or video production company

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.

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

Successful completion of the Digital Communications program of study will fulfill requirements of a Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Principles of Arts, Audio/Visual Technology, and Communication (1st Level AV)

Credit: 1 **Grade: 9-12**
PEIMS # 13008200 **Course # 8530**

Prerequisite: none

In this course, students will be introduced to the various and multifaceted career opportunities in the Arts, Audio/Video Technology, and Communications cluster and the knowledge, skills, and educational requirements for those opportunities. G-P's video program is a professional-oriented career training set of instruction. The students who follow this course plan have been recognized on a national level. Video production is not only instructional and analytical but also artistic.

Audio/Video Production I (2nd Level AV)

Credit: 1 **Grade: 9-12**
PEIMS # 13008500 **Course # 8580**

Prerequisite (district): Principles of Arts, A/V Technology, and Communication, application required (due to limited spacing)

Almost every student has a video phone in their pocket. With that tool, a whole world of career opportunities is becoming available. Video production is probably the most universally known of all visual media and is an integral component of many technology applications. To further develop the technical knowledge and skills needed for success in the Arts, Audio/Video Technology and Communications cluster, students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video activities by producing work for the daily morning announcements. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Audio/Video Production II (3rd Level AV)

Credit: 1 (1 period) **Grade: 10-12**
PEIMS # 13008600 **Course # 8590**

Prerequisite: Audio/Video Production I, third year students with instructor approval

This course is designed for third year video students who have completed both Principles of Arts, A/V and Communications (first year) and Audio/Video Production 1 (second year/GPTC) and Video Tech (second year students/GPTV). These students will primarily work as producers for video projects brought to the class by outside clients. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Practicum in A/V Production (first time taken) (4th Level AV)

Credit: 2 (1 periods) **Grade: 11-12**
PEIMS # 13008700 **Course # 8595**

Prerequisite: Audio/Video Production II, application required (due to limited spacing)

As the capstone of the Audio/Video Production track, this course will give students the opportunity to work off-campus. Internships at local businesses and TV stations are available to seniors with enough room in their schedule to participate. A minimum of two periods in the afternoon are needed to allow for 10 hours a week of intern time. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Practicum in A/V Production (second time taken) (5th Level AV)

Credit: 2 (1 periods) **Grade: 11-12**
PEIMS # 13008710 **Course # 8596**

Prerequisite: Practicum in A/V First time taken, application required (due to limited spacing)

As the capstone of the Audio/Video Production track, this course will give students the opportunity to work off-campus. Internships at local businesses and TV stations are available to seniors with enough room in their schedule to participate. A minimum of two periods in the afternoon are needed to allow for 10 hours a week of intern time. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Business, Marketing, and Finance

COURSES

LEVEL 1
Principles of Business, Marketing, and Finance

LEVEL 2
Business Information Management I
Accounting

LEVEL 3
Financial Mathematics
Accounting II

LEVEL 4
Practicum in Business Management
Career Preparation I

POSTSECONDARY OPTIONS

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

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
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%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Business Professionals of America (BPA), Futu re Business Leaders of America (FBLA), and DECA

Work Based Learning Activities:
Internship with local accounting firm; Microsoft Office Specia list (MOS) certifications

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

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

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

Approved Statewide Program of Study - September 2019

Principles of Business, Marketing, and Finance

Credit: 1 **Grade: 9-11**
PEIMS # 13011200 **Course # 7031**

Prerequisite: none

For students interested in pursuing a degree in business, this introductory course will allow the student to explore various branches of the business world. Learn about marketing goods and services, advertising, and the impact of global business on the world economy. Analyze the sales process and explore financial management.

Business Information Management I

Credit: 1 **Grade: 9-12**
PEIMS # 13011400 **Course # 7020**

Prerequisite (recommended): Touch Systems Data Entry

Learn how to produce quality documents used in the business world to communicate, make projections, and track progress. A must for all career and post-secondary assignments. The class will focus on Microsoft Office applications. Students will develop skills using Word, Access, Excel, Desktop Publishing, and PowerPoint to enhance business production experiences.

Accounting I

Credit: 1 **Grade: 10-12**
PEIMS # 13016600 **Course # 9770**

Prerequisite (recommended): Principles of Business, Marketing, and Finance

This is the introductory course for students interested in the field of accounting, "the language of business." It is the vehicle for reporting financial information about a business entity to many different groups of people. Learn the skills to record, classify, summarize, analyze, and communicate accounting information both manually and with the use of accounting software. Utilize these skills in management and decision making.

Accounting II

Credit: 1 **Grade: 11-12**
PEIMS # 13016700 **Course # 9760**

Prerequisite: Accounting I

Extend your knowledge of basic accounting and managerial decision making. Produce and analyze financial reports. Capture all details necessary to satisfy the needs of a business: managerial, financial reporting, projection, analysis, and tax reporting.

Financial Mathematics

Credit: 1 **Grade: 10-12**
PEIMS # 13018000 **Course # 7037**

Prerequisite: Algebra I

In this course, students explore personal money management such as banking, taxes, loans, credit cards, and investments while applying critical thinking skills to analyze personal financial decisions based on current and projected economic factors. This course relies heavily on the usage of Microsoft Excel to calculate important financial data. This course satisfies one of the four required math credits for graduation.

Practicum in Business Management

Credit: 2 (2 periods) **Grade: 11-12**
PEIMS # 13012200 **Course # 7010**

Prerequisite (recommended): Touch System Data Systems or BIM II

The Practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or post-secondary education.

Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers.

Career Preparation I

Credit: 2 **Grade: 11-12**
PEIMS # 12701300 **Course # 9080**

Prerequisite (district): at least 16 years of age

This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one-hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required.

Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher.

This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Business, Marketing, and Finance

COURSES

LEVEL 1

Principles of Business, Marketing, and Finance

LEVEL 2

Business Information Management I

LEVEL 3

Business Information Management II

LEVEL 4

Practicum in Business Management

Career Preparation I

POSTSECONDARY OPTIONS

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

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

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Business Professionals of America (BPA), Future Business Leaders of America (FBLA), and DECA

Work Based Learning Activities: Internship with local business or chamber of commerce;

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

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

Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry Endorsement. Approved Statewide Program of Study - September 2019

Principles of Business, Marketing, and Finance

Credit: 1 **Grade: 9-11**
PEIMS # 13011200 **Course # 7031**

Prerequisite: none

For students interested in pursuing a degree in business, this introductory course will allow the student to explore various branches of the business world. Learn about marketing goods and services, advertising, and the impact of global business on the world economy. Analyze the sales process and explore financial management.

Business Information Management I

Credit: 1 **Grade: 9-12**
PEIMS # 13011400 **Course # 7020**

Prerequisite (recommended): Touch Systems Data Entry

Learn how to produce quality documents used in the business world to communicate, make projections, and track progress. A must for all career and post-secondary assignments. The class will focus on Microsoft Office applications. Students will develop skills using Word, Access, Excel, Desktop Publishing, and PowerPoint to enhance business production experiences.

Business Information Management II

Credit: 1 **Grade: 10-12**
PEIMS # 13011500 **Course # 7030**

Prerequisite: Business Information Management I

Learn the bells and whistles of Microsoft Office to support performance in the workplace, society, and post-secondary education. Produce sophisticated documents and presentations using this multimedia software package (Microsoft Office). Utilize this class to develop the skills necessary to meet business certification standards. Global certification such as IC3 and MOS are beneficial when applying for business related positions.

Practicum in Business Management

Credit: 2 (2 periods) **Grade: 11-12**
PEIMS # 13012200 **Course # 7010**

Prerequisite (recommended): Touch System Data Systems or BIM II

The Practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or post-secondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers.

Career Preparation I

Credit: 2 **Grade: 11-12**
PEIMS # 12701300 **Course # 9080**

Prerequisite: at least 16 years of age

This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one-hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required. Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher.

This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Business, Marketing, and Finance

COURSES

LEVEL 1 — Principles of Business, Marketing, and Finance

LEVEL 2 — Business Information Management I

LEVEL 3 — Entrepreneurship

LEVEL 4 — Practicum in Business Management
Career Preparation I

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Microsoft Office Expert - Excel	Certified Facility Manager	Business Administration and Management		
Microsoft Office Expert - Word	Certified Management Accountant	Business/ Commerce		
Entrepreneurship and Small Business	Certified Project Consultant	Public Administration		

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%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Business Professionals of America (BPA), Future Business Leaders of America (FBLA), and DECA

Work Based Learning Activities:
Internship with local management consulting firm

The Entrepreneurship program of study teaches CTE concentrators 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 resources.

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

Successful completion of the Entrepreneurship program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Principles of Business, Marketing, and Finance

Credit: 1 **Grade: 9-11**
PEIMS # 13011200 **Course # 7031**

Prerequisite: none

For students interested in pursuing a degree in business, this introductory course will allow the student to explore various branches of the business world. Learn about marketing goods and services, advertising, and the impact of global business on the world economy. Analyze the sales process and explore financial management.

Business Information Management I

Credit: 1 **Grade: 9-12**
PEIMS # 13011400 **Course # 7020**

Prerequisite (recommended): Touch Systems Data Entry

Learn how to produce quality documents used in the business world to communicate, make projections, and track progress. A must for all career and post-secondary assignments. The class will focus on Microsoft Office applications. Students will develop skills using Word, Access, Excel, Desktop Publishing, and PowerPoint to enhance business production experiences.

Entrepreneurship

Credit: 1 **Grade: 10-12**
PEIMS # 13034400 **Course # 9243**

Prerequisite (recommended): Principles of Business, Marketing, and Finance

In Entrepreneurship, students will gain the knowledge and skills needed 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, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.

Practicum in Business Management

Credit: 2 (2 periods) **Grade: 11-12**
PEIMS # 13012200 **Course # 7010**

Prerequisite (recommended): BIM II

The Practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or post-secondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers.

Career Preparation I

Credit: 2 **Grade: 11-12**
PEIMS # 12701300 **Course # 9080**

Prerequisite: at least 16 years of age

This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one- hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required. Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Education and Training

COURSES

LEVEL 1

Principles of Human Services

LEVEL 2

Child Development

LEVEL 3

Project Based Research
Career Preparation I

LEVEL 4

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Child Development Associate		Early Childhood Education and Teaching		
Educational Aide I	Texas Educator Certification Program	Multicultural Early Childhood Development		
	County Librarian	Kindergarten/ Preschool Education and Training	Early Childhood	Educational, Instructional, and Curriculum Supervision
	Professional Counselor	Psychology/Sociology		Educational Leadership and Administration

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
Kindergarten Teachers, except Special Education	$53,310	1,848	17%
Preschool Teachers	$27,851	4,330	17%
Special Education Teachers, Preschool	$55,670	148	27%
Elementary School Teachers	$54,140	13,121	16%
Education Administrators, Elementary and Secondary School	$79,830	2,407	16%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Texas Association of Future Educators; Fam ily, Career, & Community Leaders of America

Work Based Learning Activities:
Teach a community education class; volunteer as a teaching assistant.

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 in basic elements of science, art, music, and literature. This program of study introduces CTE concentrators to tasks necessary for planning, directing, and coordinating activities for young children.

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

Principles of Human Services

Credit: 1 **Grade: 9-12**

PEIMS # 13024200 **Course # 9203**

Prerequisite: none

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

Child Development

Credit: 1 **Grade: 10-12**

PEIMS # 13024700 **Course # 9122**

Prerequisite: none

Recommended: Principles of Human Services

This technical laboratory 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.

Project Based Research (first time taken)

Credit: 1 **Grade: 11-12**

PEIMS # 12701500 **Course # 9211**

Prerequisite: none

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

Career Preparation I

Credit: 2 **Grade: 11-12**

PEIMS # 12701300 **Course # 9080**

Prerequisite: at least 16 years of age

This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one-hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required. Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

TEACHING AND TRAINING

COURSES

LEVEL 1
Principles of Education and Training
Principles of Human Services

LEVEL 2
Child Development

LEVEL 3
Instructional Practices

LEVEL 4
Practicum in Education and Training

POSTSECONDARY OPTIONS

Educational Aide I

Texas Educator Certification Program

Educational Instructional Technology

Counselor, Professional

Athletic Trainer

Teacher Education

Education, General (or specific subject area)

Health and Physical Education/fitness

Bilingual and Multilingual Education

Special Education

Instruction and Learning

Educational Leadership and Administration, General

Social and Philosophical Foundations of Education

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
Adult Basic allJ Secondary Education and Literacy Teachers and Instructors	$48,069	862	17%
Middle SchocJ Teachers, Except .special and Career/Technical Educatioo	$54,510	6,407	15%
Career and Tectm1cal Education Teachers, Secondary School	$56,360	719	9%
Special Education Teachers, Secondary School	$56,720	980	18%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Texas Association of Future Educators, or Family, Career and Community Leaders of America

Work Based Learning Activities:
Teach a community education class; intern as a teaching assistant or tutor; serve as a camp counselor.

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 CTE concentrators to a wide variety of student groups and their corresponding needs It fam1l1arizes them with the processes for developing curriculum, coord1nat1ng educational content, and coaching groups and ind1v1duals

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

Principles of Education and Training

Credit: 1 **Grade: 9-12**
PEIMS # 13014200 **Course # 9255**

Prerequisite: none
This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course. Principles of Education and Training is designed to introduce learners to the various careers available within the Education and Training Career Cluster. Students use self-knowledge as well as educational and career information to analyze various careers within the Education and Training Career Cluster. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.

Principles of Human Services

Credit: 1 **Grade: 9-12**
PEIMS # 13024200 **Course # 9203**

Prerequisite: none
This laboratory course will enable students to investigate careers in the human services career cluster including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, and/or high-demand human services careers.

Child Development

Credit: 1 **Grade: 10-12**
PEIMS # 13024700 **Course # 9122**

Recommended: Principles of Human Services
This technical laboratory 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.

Instructional Practices

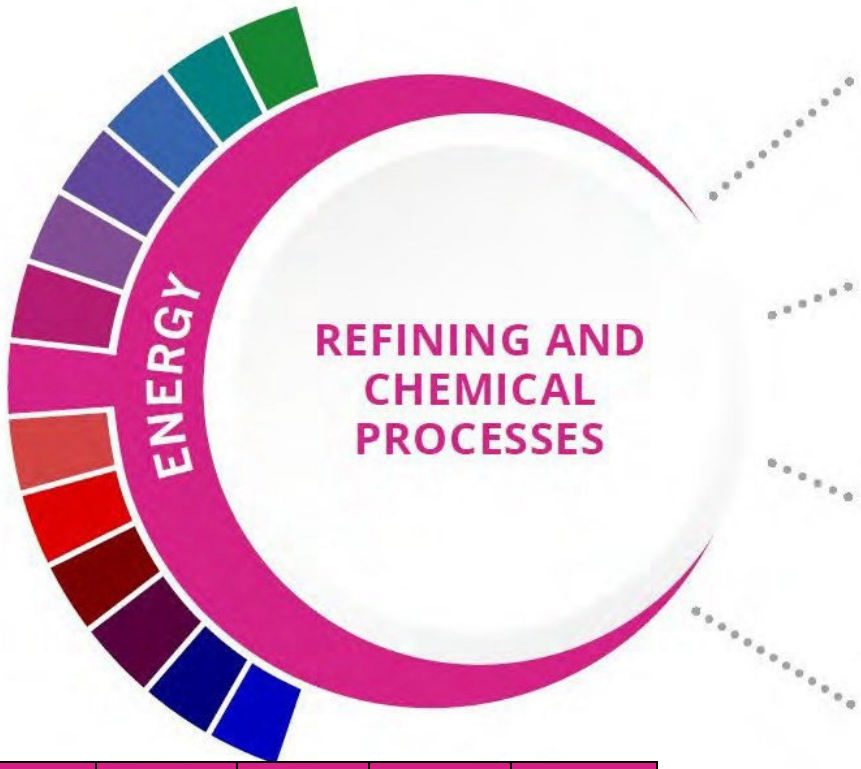
Credit: 2 **Grade: 11-12**
PEIMS # 13014400 **Course # 9124**

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

Practicum in Education and Training

Credit: 2 **Grade: 11-12**
PEIMS # 13014500 **Course # 9125**

Recommended prerequisites: Principles of Education and Training
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 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, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.



Level 1

Level 2

Level 3

Introduction to Process Technology DC – *(1 Credit)*

PTAC 1302 (Fall) – 3 Credit Hours

PTAC 1308 (Spring) – 3 Credit Hours

Level 4

Petrochemical Safety, Health, and Environment – (1 Credit)

PTAC 1410 (Fall) – 4 Credit Hours

PTAC 1354 (Spring) – 4 Credit Hours

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
MSSC Certified Production Technician (CPT)	Process Technology Certificate Level II	Process Technology	Business Administration and Management, General	Business Administration and Management, General
	Petroleum Energy Technology Certificate	Process Operating Technology	Business/ Commerce, General	Business/ Commerce, General
	Qualification of Ultrasonic Testing Examiners (Sizing)	Logistics, Material, and Supply Chain Management	Industrial Engineering	Industrial Engineering
	Certified Plant Supervisor	Petroleum Technology/ Technician	Petroleum Engineering	Petroleum Engineering

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

Occupations	Median Wage	Annual Openings	% Growth
Gas Plant Operators	$62,650	312	9%
Petroleum Pump System Operators, Refinery Operators, and Gaugers	$71,488	1,181	9%
Power Plant Operators	$71,635	309	9%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Tour a power plant or refinery	Explore student summer conferences.

The Refining and Chemical Processes program of study helps CTE learners discover how to monitor, adjust, and control different equipment housed in petrochemical plants and refineries. It introduces students to the computer technology and instrumentation used to operate a variety of equipment systems and industrial processes, helping students build the skills needed to operate these systems.

The Energy Career Cluster prepares individuals for careers in the designing, planning, maintaining, generating, transmission, and distribution of traditional and alternative energy.

Successful completion of the Refining and Chemical Processes program of study will fulfill requirements of the Business and Industry Endorsement or STEM endorsement if the math and science

Introduction to Process Technology (Refinery Operations)

Credit: 1 **Grade: 11-12**
PEIMS # 13040502 **Weighted GPA Course # 9660**
Prerequisite: must meet all dual credit requirements

PTAC 1302: Introduction to Process Technology Dual Credit (fall)
This course is an introduction to chemical and refinery plant operations. Topics will include process technician duties, responsibilities, expectations, plan organizations, plan process and utility systems, and the physical and mental requirements of the process technician.

PTAC 1310: Process Technology I: Equipment Dual Credit (spring)
Students will receive instruction in the use of common process equipment.

Petrochemical Safety and Environment

Credit: 1 **Grade: 11-12**
PEIMS # 13040504 **Weighted GPA Course # 9670**
Prerequisite: must meet all dual credit requirements, Refinery Operations I

PTAC 1308: Safety, Health, and Environment I Dual Credit (Fall)
This course focuses on the development of knowledge and skills to reinforce the attitudes and behaviors required for safe and environmentally sound work habits. Emphasis will be placed on safety, health, and environmental issues in the performance of all job tasks and regulatory compliance issues.

PTAC 1354: Industrial Processes Dual Credit
This course is a study of the common types of industrial processes.

NAME: **DMC STUDENT ID:** **HIGH SCHOOL:**

Del Mar College – Early College Programs Courses Toward Associate in Applied Science: Process Technology							
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Fall	CORE						
	TOTAL						
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	CORE						
	TOTAL						
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Fall	PTAC 1302		3	3	7		
	TOTAL		**3**	**3**	**7**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	PTAC 1308		3	3	7		
	TOTAL		**3**	**3**	**7**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Fall	PTAC 1410		3	4	7		
	TOTAL		**3**	**4**	**7**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	PTAC 1354		3	4	7		
	TOTAL		**3**	**4**	**7**		
	TOTAL SEMESTER CREDIT HOURS: 13						

MAJOR CODE: PRII.CER1
REM LEVEL: 1-1-1

COST PER CREDIT HR: $33.33
(EXAMPLE: FIRS1407 =$133.32)

LAB FEES: $24 -$48
(Some courses may be subject to Lab Fees)

Process Technology Courses after High School:

PTAC 2420: Process Tech II- Systems

PTAC 1332: Process Instrumentation I

PTAC 2438: Process Tech III- operations

PTAC 2314: Process Instrumentation II

PTAC 2346: Process Quality

PTAC 2287: Process Troubleshooting (Capstone)

*Lecture / Coursework is delivered online

*Students must attend a lab once a week on DMC West Campus

PTAC 1302. INTRODUCTION TO PROCESS TECHNOLOGY (2-3-3) An introduction of the processing industries.

PTAC 1308. SAFETY, HEALTH AND ENVIRONMENT I (2-3-3) An overview of safety, health, and environmental issues in the performance of all job tasks in process industries.

PTAC 1354. INDUSTRIAL PROCESSES (2-3-3) A study of the common types of industrial processes. Prerequisite: PTAC 1302, PTAC 1308, PTAC 1310.

For More Information Contact:
Technical Education:
(361)-698-1701
Dual Credit Office:
(361)-698-1634

Health Science

COURSES

LEVEL 1
Principles of Health Science

LEVEL 2
Medical Terminology /
Health Science Theory

LEVEL 3
Anatomy and Physiology

LEVEL 4
Practicum in Health Science
- Phlebotomy

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Limited Licensed Radiology Technologist	Medical Sonographer	Nuclear Medical Technology / Technologist		Radiologist
EKG/ ECG Technician	Radiologic Technologist	Magnetic Resonance Imaging (MRI) Technology / Technician	Medical Radiolog ic Technology / Science Radiation Therapist	Radiologic Technology / Science - Radiographer
Medical Laboratory Technician Phlebotomy Technician				

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
Diagnostic Medical Sonographers	$69,90 9	495	35%
Phlebotomists	$30,59 7	1,442	36%
Nuclear Medicine Technologists	$75,96 2	91	13%
Radiologic Technologists	$55,49 4	1,196	19%
Magnetic Resonance Imaging Technologists	$68,66 1	217	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Health Occupation Students of America (HOSA)

Work Based Learning Activities:
Clinical rotations at a community wellness center, hospital, assiste d living, nursing home

The Healthcare Diagnostics program of study introduces students to occupations and educational opportunities relate d to performing complex medical laboratory tests for the diagnosis, treatment, and prevention of disease. This program of study may also include exploration into the opportunities associated with blood laboratories as well as radiologic technology, and ultrasonic technology.

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

Successful completion of the Healthcare Diagnostics program of study will fulfill requirements of the Public Service

Principles of Health Science

Credit: 1 **Grade: 9-10**

PEIMS # 13020200 **Course # 9601**

Prerequisite (recommended): Algebra I and Bio

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

Medical Terminology Dual-Credit

Credit: 1 **Grade: 10-12**

PEIMS # 13020300 **Weighted GPA Course # 9605**

Prerequisite: must meet all dual credit requirements

HPRS 1106

This is a prerequisite for selected health occupation courses. The course is a study of medical terminology, word origin, structure, and application.

Health Science I Continuing Education (Medical Terminology / Health Science Theory)

Credit: 1 per semester (2 credits for year) **Grade: 10-12**

PEIMS # 13020300 / 13020400 **Weighted GPA Course # 9620, 9620B**

Prerequisite: Biology, must meet all dual credit requirements

Medical Terminology and Medical Law and Ethics (fall)

This course is the study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations, symbols, surgical procedures, medical specialties, and diagnostic procedures. It also focuses on principles, procedures, and regulations that govern the legal and ethical relationships among physicians, patients, and health care professionals. Topics also include ethical issues related to the various healthcare professions and patient confidentiality. Includes HPRS 1106 and Continuing Education Classes

Electrocardiography and Health Unit Coordinator (spring)

This course includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities. Fundamentals of the cardiovascular anatomy and physiology are also covered.

Anatomy and Physiology of Human Systems

Credit: 1 **Grade: 10-12**

PEIMS # 13020600 **Course # 3360**

Prerequisite: Biology and a second-high school science credit; a course from the Health Science Career Cluster

Anatomy and Physiology is a class designed to give students an in-depth introduction to the anatomy and physiology of the human body. This class will provide students with an overall understanding of the structures, organs, and systems that make up the human body. Lab experiments will include fresh and preserved specimens and digital dissections. Students will take a comparative approach using various organs. In investigations, students will be required to observe, record, interpret, and analyze scientific data in an organized problem-solving method. This course will emphasize Health Science careers and an exploration of biotechnology. Students will complete case studies on both human and veterinary anatomy. This course supports the learning occurring in the Health Science program and provides students with fundamental knowledge to improve their certification preparation.

Practicum of Health Science Continuing Education

Credit: 2 **Grade: 11-12**

PEIMS # 13020500 **Weighted GPA Course # 9610, 9610B, 9610C**

Prerequisite: Health Science Theory, Biology, must meet all dual credit requirements

Phlebotomy and Clinical (fall)

In this course, students will develop skills in the performance of a variety of blood collection methods using proper techniques and standard precaution. Methods and equipment used will include vacuum collection devices, syringes, capillary skin puncture, butterfly needles, blood culture and specimen collection on adults, children, and infants. Emphasis will be placed on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. The clinical portion of this course will include a health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision will be provided by the clinical professional.

Nurse Aide for Health Care and Clinical (spring)

This course will focus on preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics will include resident's rights, communication, safety, observation, reporting, and assisting residents in maintaining basic comfort and safety. An emphasis will be placed on effective interaction with members of the health care team. The clinical portion of this course will be a health-related work-based learning experience that enables students to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the instructor.

Students will be responsible for additional supplies and materials required by the instructor.

SECOND SEMESTER IF NOT AGE ELIGIBLE

Patient Care Technician is a national certification. This healthcare profession will deliver care under the supervision of licensed medical professionals. The PCT often work in hospitals, emergency departments, doctor offices, and urgent care centers. This course will prepare students with the skills needed to be a PCT.

Gregory-Portland P-TECH High School Health Science Continuing Ed with Del Mar College

GRADE LEVEL	High School Credit Courses		Continuing Ed Courses	Important Requirements
9	English I	1 Credit		Spring Semester • Apply to Del Mar • Take TSI • Schedule Advising Appointment • Review VN Requirements
	Algebra I or Geometry	1 Credit		
	World Geography	1 Credit		
	Biology	1 Credit		
	Foreign Language	1 Credit		
	Principles of Health Science	1 Credit		
	PE	1 Credit		
10	English II	1 Credit	Fall Semester HPRS 1006 / HPRS 1005 Spring Semester ECRD 1011	
	Geometry or Algebra II	1 Credit		
	World History	1 Credit		
	Chemistry	1 Credit		
	Foreign Language II	1 Credit		
	Health Science Theory / Clinical (Med Term/EKG)	2 Credits		
	Art	1 Credit		
11	English III	1 Credit	Fall Semester PLAB 1023 Spring Semester NUPC 1020	**Industry Based Certifications Available: • EKG • Phlebotomy • Patient Care Tech • Certified Medical Assistant • Emergency Medical Technician – Basic • Certified Nurse Aide
	Algebra II / Pre-Cal	1 Credit		
	Anatomy / Physiology	1 Credit		
	US History	1 Credit		
	Heatlth Science Practicum (Phleb / PCT)	2 Credit		
12	English IV	1 Credit	Fall Semester CMA Spring Semester EMSP 1501/EMSP 1160 OR NURA 1001 / NURA 106	
	4th Math	1 Credit		
	4th Science	1 Credit		
	Government / Economics	.5 / .5 Credits		
	Health Science Practicum II (CMA / EMT or CNA)	2 Credits		
Key= Yellow – CTE Courses Green – DC Courses	27 Credits Foundation with Endorsement (Public Services)			

Health Science

COURSES

LEVEL 1

Principles of Health Science

LEVEL 2

Medical Terminology / Health Science Theory

LEVEL 3

Anatomy and Physiology

LEVEL 4

Practicum in Health Science

- Patient Care Tech
- CNA
- EMT

POSTSECONDARY OPTIONS

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

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
Medical Assistants	$29,59 8	8,862	30%
Surgical Technologists	$45,03 2	1,150	20%
Dental Hygienists	$73,50 7	1,353	38%
Physicians and Surgeons	$213,07 1	1,151	30%
Dental Assistants	$34,84 0	4,422	31%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
SkillsUSA
Health Occupation Students of America (HOSA)

Work Based Learning Activities:
Volunteer at a community wellness center, hospital, assisted living, or nursing home.

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

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

Successful completion of the Healthcare Therapeutic program of study will fulfill requirements of the Public Service

Principles of Health Science

Credit: 1 **Grade: 9-10**
PEIMS # 13020200 **Course # 9601**

Prerequisite (recommended): Algebra I and Bio

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

Medical Terminology Dual Credit

Credit: 1 **Grade: 9-12**
PEIMS # 13020300 **Weighted GPA Course # 9606**

Prerequisite: must meet all dual credit requirements

HPRS 1106

This is a prerequisite for selected health occupation courses. The course is a study of medical terminology, word origin, structure, and application.

Health Science I Continuing Education (Medical Terminology / Health Science Theory)

Credit: 1 per semester (2 credits for year) **Grade: 10-12**
PEIMS # 13020300 / 13020400 **Weighted GPA Course # 9620, 9620B**

Prerequisite: Biology, must meet all dual credit requirements

Medical Terminology and Medical Law and Ethics (fall)

This course is the study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations, symbols, surgical procedures, medical specialties, and diagnostic procedures. It also focuses on principles, procedures, and regulations that govern the legal and ethical relationships among physicians, patients, and health care professionals. Topics also include ethical issues related to the various healthcare professions and patient confidentiality. Includes HPRS 1106 and Continuing Education Classes

Electrocardiography and Health Unit Coordinator (spring)

This course includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities. Fundamentals of the cardiovascular anatomy and physiology are also covered.

Anatomy and Physiology

Credit: 1 **Grade: 10-12**
PEIMS # 13020600 **Course # 3360**

Prerequisite: Biology and a second-high school science credit; a course from the Health Science Career Cluster

Anatomy and Physiology is a class designed to give students an in-depth introduction to the anatomy and physiology of the human body. This class will provide students with an overall understanding of the structures, organs, and systems that make up the human body. Lab experiments will include fresh and preserved specimens and digital dissections. Students will take a comparative approach using various organs. In investigations, students will be required to observe, record, interpret, and analyze scientific data in an organized problem-solving method. This course will emphasize Health Science careers and an exploration of biotechnology. Students will complete case studies on both human and veterinary anatomy. This course supports the learning occurring in the Health Science program and provides students with fundamental knowledge to improve their certification preparation.

Practicum of Health Science Continuing Education

Credit: 2 **Grade: 11-12**
PEIMS # 13020500 **Weighted GPA Course # 9610, 9610B, 9610C**
Prerequisite: Health Science Theory, Biology, must meet all dual credit requirements

Phlebotomy and Clinical (fall)
In this course, students will develop skills in the performance of a variety of blood collection methods using proper techniques and standard precaution. Methods and equipment used will include vacuum collection devices, syringes, capillary skin puncture, butterfly needles, blood culture and specimen collection on adults, children, and infants. Emphasis will be placed on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. The clinical portion of this course will include a health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision will be provided by the clinical professional.

Nurse Aide for Health Care and Clinical (spring)
This course will focus on preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics will include resident's rights, communication, safety, observation, reporting, and assisting residents in maintaining basic comfort and safety. An emphasis will be placed on effective interaction with members of the health care team. The clinical portion of this course will be a health-related work-based learning experience that enables students to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the instructor.
Students will be responsible for additional supplies and materials required by theinstructor.
SECOND SEMESTER IF NOT AGE ELIGIBLE
Patient Care Technician is a national certification. This healthcare profession will deliver care under the supervision of licensed medical professionals. The PCT often work in hospitals, emergency departments, doctor offices, and urgent care centers. This course will prepare students with the skills needed to be a PCT.

Practicum in Health Science for Emergency Medical Technician- Basic Dual Credit

Credit: 2 (3 periods) **Grade: 11-12**
PEIMS # 13020500 **Weighted GPA Course # 8920**
Prerequisite: Health Science Theory, Biology, must meet all dual credit requirements
Located at Del Mar College
This course is the preparation for certification as an Emergency Medical Technician (EMT) Basic. The course includes all the skills necessary to provide emergency medical care at a basic life support level with an emergency service or other specialized services. The course also includes a basic type of health profession work-based instruction that helps students synthesize new knowledge, apply new knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to the theory. Close and/or direct supervision is provided by the clinical professional generally in a clinical setting. Clinical education is an unpaid learning experiences and requires clinical time in addition to class time. Students are required to purchase uniforms and equipment and must meet JCAHO requirements. Classes include
EMSP 1501 and EMSP 1160 (both spring).

Gregory-Portland P-TECH High School Health Science Continuing Ed with Del Mar College

GRADE LEVEL	High School Credit Courses		Continuing Ed Courses	Important Requirements
9	English I	1 Credit		**Spring Semester** **Apply to Del Mar** • **Take TSI** • **Schedule Advising Appointment** • **Review VN Requirements**
	Algebra I or Geometry	1 Credit		
	World Geography	1 Credit		
	Biology	1 Credit		
	Foreign Language	1 Credit		
	Principles of Health Science	1 Credit		
	PE	1 Credit		
10	English II	ICredit	**Fall Semester** **HPRS 1006 / HPRS 1005** **Spring Semester** **ECRD 1011**	
	Geometry or Algebra 11	ICredit		
	World History	ICredit		
	Chemistry	ICredit		
	Foreign Language II	ICredit		
	Health Science Theory/Clinical (Med Term/EKG)	2Credits		
	Art	L Credit		
11	English III	1 Credit	**Fall Semester** **PLAB 1023** **Spring Semester** **NUPC 1020**	**<u>Industry</u> Based Certifications Available:** • **EKG** • **Phlebotomy** • **Patient CareTech** • **Certified Medical Assistant** • **Emergency Medical Technician - Basic** • **Certified Nurse Aide**
	Algebra II/ Pre-Ca I	1 Credit		
	Anatomy/ Physiology	1 Credit		
	US History	1 Credit		
	Health Science Practicum (Ph Ie b/ PCT)	2 Credit		
12	English IV	ICredit	**Fall Semester** **CMA** Spring Semester EMSP 1501/EMSP 1160 <u>OR</u> NURA 1001 / NURA 106	
	4th Math	ICredit		
	4th Science	ICredit		
	Government/ Economics	.5/ .5 Credits		
	Health Science Practicum II (CMA/ EMT or CNA)	2 Credits		
Key= Yellow- CTE Courses Green - DC Courses	27 Credits Foundation with Endorsement (Public Services)			

P-TECH NURSING PATHWAY TO LVN

(SEE PTECH CROSSWALK FOR ACADEMIC DUAL CREDIT)

ONLY AVAILABLE TO THE CLASS OF 2026 AND BEYOND

COURSES

LEVEL 1

LEVEL 2

Principles of Health Science

LEVEL 3

A&P 1 DC - Medical Microbiology (Fall)
A&P 2 DC - Human Physiology (Spring)
Health Science Theory / Clinical MED Term, EKG

LEVEL 4

Health Science Practicum (Phlebotomy / PCT, or CMA/EMT)
Nursing Science DC

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Certified Medical Assistant	Licensed Vocational Nurse	Registered Nursing / Registered Nurse	Informatics Nurse Specialists	Nurse Practitioner
Certified Nur se Aide / Assistant				Nursing Administration
Certified Patient Care Technician				Nurse Anesthetist

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Licensed Vocational Nurses	$45,17 8	7,186	21%
Registered Nurses	$68,68 2	17,49 3	26%
Nurse Practitioners	$107,82 7	977	50%
Nurse Anesthetist s	$154,85 6	357	23%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Health Occupation Students of America (HOSA)

Work Based Learning Activities:
Volunteer at a community wellness center, hospital, assisted living center, o r nursing home.

The Nursing Program of Study introduces students to knowledge and skills related to patient care. CTE concentrators may learn about or practice caring for patients, routine procedures such as monitoring vital signs, development and implementation of care plans, maintenance of medical records, and disease or pain management. Students may focus on the healthcare system and research system designs and make recommended modifications.

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

Successful completion of the Nursing program of study will fulfill requirements of the Public Service Endorsement.
Approved Statewide Program of Study - September 2019

Principles of Health Science

Credit: 1 **Grade: 9-10**
PEIMS # 13020200 **Course # 9601**

Prerequisite (recommended): Algebra I and Bio

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

Medical Terminology Dual Credit

Credit: 1 **Grade: 9-12**
PEIMS # 13020300 **Weighted GPA Course # 9606**

Prerequisite: must meet all dual credit requirements

HPRS 1106

This is a prerequisite for selected health occupation courses. The course is a study of medical terminology, word origin, structure, and application.

Health Science I Continuing Education (Medical Terminology / Health Science Theory)

Credit: 1 per semester (2 credits for year) **Grade: 10-12**
PEIMS # 13020300 / 13020400 **Weighted GPA Course # 9620, 9620B**

Prerequisite: Biology, must meet all dual credit requirements

Medical Terminology and Medical Law and Ethics (fall)

This course is the study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations, symbols, surgical procedures, medical specialties, and diagnostic procedures. It also focuses on principles, procedures, and regulations that govern the legal and ethical relationships among physicians, patients, and health care professionals. Topics also include ethical issues related to the various healthcare professions and patient confidentiality. Includes HPRS 1106 and Continuing Education Classes

Electrocardiography and Health Unit Coordinator (spring)

This course includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities. Fundamentals of the cardiovascular anatomy and physiology are also covered.

Anatomy and Physiology Dual Credit

Credit: 1 **Grade: 10-12**
PEIMS # 13020600 **Weighted GPA Course # 3390**

Prerequisite: Biology and a second-high school science credit; a course from the Health Science Career Cluster. Must meet all Dual Credit requirements.

Anatomy and Physiology is a class designed to give students an in-depth introduction to the anatomy and physiology of the human body. This class will provide students with an overall understanding of the structures, organs, and systems that make up the human body. Lab experiments will include fresh and preserved specimens and digital dissections. Students will take a comparative approach using various organs. In investigations, students will be required to observe, record, interpret, and analyze scientific data in an organized problem-solving method. This course will emphasize Health Science careers and an exploration of biotechnology. Students will complete case studies on both human and veterinary anatomy. This course supports the learning occurring in the Health Science program and provides students with fundamental knowledge to improve their certification preparation.

Del Mar College - BIOL 2401 HUMAN ANATOMY AND PHYSIOLOGY I (Fall Semester)

A study of the structure and function of the human body. Course includes anatomical terminology and principles of cell biology followed by an in-depth study of tissues and the integumentary, skeletal, muscular and nervous systems.

PREREQUISITE(S) - One year of high school biology (or 4 semester hours of college biology) and one year of high school chemistry (or 4 semester hours of college chemistry)

Del Mar College - BIOL 2402 HUMAN ANATOMY AND PHYSIOLOGY II (Spring Semester)

A continuation of the study of the structure and function of the human body. Detailed study of special senses and the endocrine, urinary, cardiovascular, respiratory, digestive and reproductive systems and human development.

PREREQUISITE(S)-BIOL 2401

Practicum of Health Science II Continuing Education

Credit: 2 **Grade: 11-12**

PEIMS # 13020500 **Weighted GPA Course # 9610, 9610B, 9610C**

Prerequisite: Health Science Theory, Biology, must meet all dual credit requirements

Phlebotomy and Clinical (fall)

In this course, students will develop skills in the performance of a variety of blood collection methods using proper techniques and standard precaution. Methods and equipment used will include vacuum collection devices, syringes, capillary skin puncture, butterfly needles, blood culture and specimen collection on adults, children, and infants. Emphasis will be placed on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. The clinical portion of this course will include a health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision will be provided by the clinical professional.

Nurse Aide for Health Care and Clinical (spring)

This course will focus on preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics will include resident's rights, communication, safety, observation, reporting, and assisting residents in maintaining basic comfort and safety. An emphasis will be placed on effective interaction with members of the health care team. The clinical portion of this course will be a health-related work-based learning experience that enables students to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the instructor.

Students will be responsible for additional supplies and materials required by the instructor.

SECOND SEMESTER IF NOT AGE ELIGIBLE

Patient Care Technician is a national certification. This healthcare profession will deliver care under the supervision of licensed medical professionals. The PCT often work in hospitals, emergency departments, doctor offices, and urgent care centers. This course will prepare students with the skills needed to be a PCT.

Practicum in Health Science for Emergency Medical Technician- Basic Dual Credit

Credit: 2 (3 periods) **Grade: 11-12**

PEIMS # 13020500 **Weighted GPA Course # 8920**

Prerequisite: Health Science Theory, Biology, must meet all dual credit requirements

Located at Del Mar College

This course is the preparation for certification as an Emergency Medical Technician (EMT) Basic. The course includes all the skills necessary to provide emergency medical care at a basic life support level with an emergency service or other specialized services. The course also includes a basic type of health profession work-based instruction that helps students synthesize new knowledge, apply new knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to the theory. Close and/or direct supervision is provided by the clinical professional generally in a clinical setting. Clinical education is an unpaid learning experiences and requires clinical time in addition to class time. Students are required to purchase uniforms and equipment and must meet JCAHO requirements. Classes include EMSP 1501 and EMSP 1160 (both spring).

Gregory-Portland P-TECH High School Pathway to LVN with Del Mar College

GRADE LEVEL	High School Credit Courses	Dual-Credit Courses	Important Requirements
9	English I — 1 Credit Algebra I or Geometry — 1 Credit World Geography — 1 Credit Biology — 1 Credit Foreign Language — 1 Credit Fine Art — 1 Credit PE — 1 Credit		Spring Semester • Apply to Del Mar • Take TSI • Schedule Advising Appointment • Review VN Requirements
10	English II — 1 Credit Geometry or Algebra II — 1 Credit World History — 1 Credit Chemistry — 1 Credit Foreign Language II — 1 Credit Psychology (DC) / Speech (DC) — .5 / .5 Credits Principles of Health Science — 1 Credit	Psyc 2301 (Fall)/SPCH 1315 (Spring)	
11	English III — 1 Credit English IV DC — 1 Credit Algebra II / Pre-Cal — 1 Credit Anatomy / Physiology (DC) — 1 Credit US History — 1 Credit Health Science Theory/ Clinical (Med Term/EKG) — 2 Credit	ENGL 1301 (Fall)/ENGL 1302 (Spring) BIOL 2401 (Fall)/BIOL 2402 (Spring)	-Meet with Del Mar Advising -Apply to "Pathway to LVN" program by April 1
12	4th Math — 1 Credit 4th Science — 1 Credit Government / Economics — .5 / .5 Credits Health Science Practicum (Phlebotomy / PCT, or CMA / EMT) — 2 Credits Nursing Science (DC) — 1 Credit	RNSG 1128 (Fall) RNSG 1125 (Fall) RNSG 2362 (Spring)	OFFICIAL ENTRY INTO NURSING PROGRAM
Key = Yellow – CTE Courses Green – DC Courses	27 Credits Foundation with Endorsement (Public Services)	25 Credit Hours	**LVN Certification will take 3 additional semesters after HS Graduation (See Attached Del Mar Degree Plan)

COURSES

LEVEL 1 — Principles of Hospitality and Tourism

LEVEL 2 — Introduction to Culinary Arts

LEVEL 3 — Culinary Arts

LEVEL 4 — Advanced Culinary Arts
Career Preparation I

POSTSECONDARY OPTIONS

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

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
Food Service Managers	$55,619	1,561	28%
Chef and Head Cooks	$43,285	1,366	25%
Food Science Technicians	$34,382	236	11%
Food and Beverage Managers	$55,619	1,561	28%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:

Family, Career, Community Leaders of America (FCCLA), SkillsUSA, American Culinary Federation, Texas Restaurant Association

Work Based Learning Activiti es:

Plan a catering event or work for a catering company; participate in a cooking course; work in a restaurant; cook at home

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.

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

Successful completion of the Culinary Arts program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September2019

Principles of Hospitality and Tourism

Credit: 1 (1 periods) **Grade: 9-12**
PEIMS # 13022200 **Course # 9206**
Prerequisite: None

Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry. This course is recommended for students in Grades 9-12. Students shall be awarded one credit for successful completion of this course.

Introduction to Culinary Arts

Credit: 1 **Grade: 10-12**
PEIMS # 13022550 **Course # 9207**
Prerequisite: none

This course focuses on 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, food production skills, industry management, and hospitality skills. Culinary Arts is a classroom and laboratory-based course.

Culinary Arts

Credit: 2 **Grade: 10-12**
PEIMS # 13022600 **Course # 8955**
Prerequisite: Introduction to Culinary Arts

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification or other appropriate industry certifications. This course is offered as a laboratory-based course.

Advanced Culinary Arts

Credit: 2 **Grade: 10-12**
PEIMS # 13022650 **Course # 8950**
Prerequisite: Introduction to Culinary Arts and Culinary Arts

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

Career Preparation I

Credit: 2 **Grade: 11-12**
PEIMS # 12701300 **Course # 9080**
Prerequisite: at least 16 years of age

This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one-hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required. Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Human Services

COURSES

LEVEL 1

Principles of Human Services

LEVEL 2

Lifetime Nutrition and Wellness/
Interpersonal Studies
Professional Communications

LEVEL 3

Practicum in Human Service

LEVEL 4

POSTSECONDARY OPTIONS

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

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

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
American Association of Family and Consumer Sciences, Family, Career and Community Leaders of America

Work Based Learning Activities:
Volunteer at a community center; intern for a community non-profit organization

The Family and Community Services program of study introduces students to knowledge and skills related to social services, including child and human development and consumer sciences. CTE concentrators 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.

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

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

Approved Statewide Program of Study - September 2019

Principles of Human Services

Credit: 1 **Grade: 9-12**
PEIMS # 13024200 **Course # 9203**

Prerequisite: none
This laboratory course will enable students to investigate careers in the human services career cluster including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, and/or high-demand human services careers.

Lifetime Nutrition and Wellness

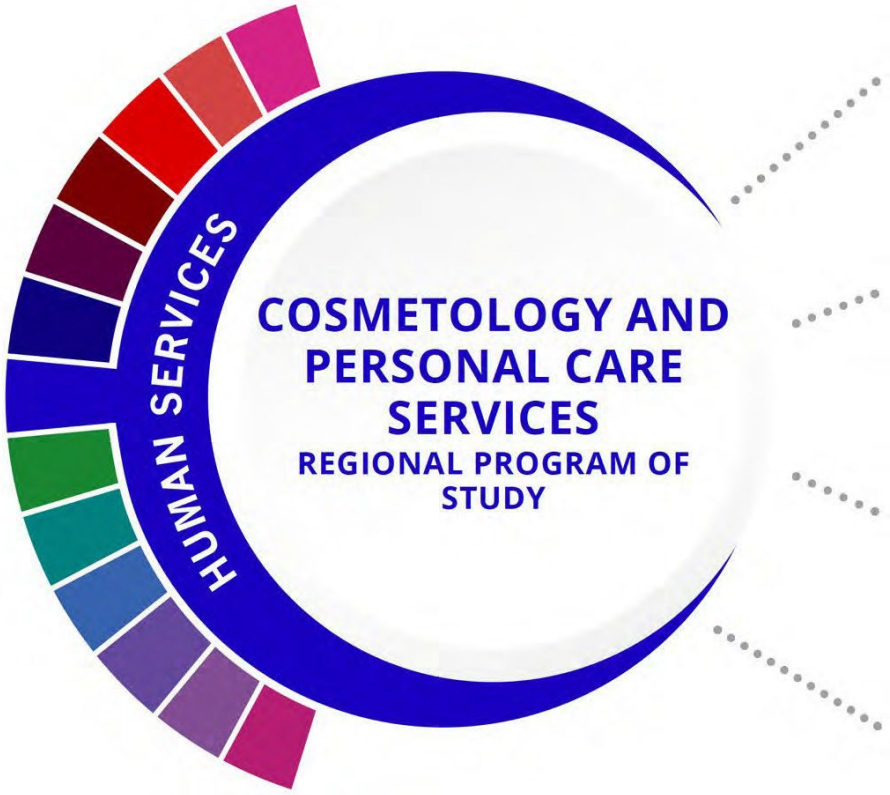
Credit: .5 **Grade: 9-12**
PEIMS # 13024500 **Course # 9201**
Prerequisite: none
Preparing food for a healthy way of living is a growing trend in our society. Utilize the skills learned in this class as you prepare foods in a lab setting. This course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education, and training, human services, and health sciences.

Interpersonal Studies

Credit: .5 **Grade: 9-12**
PEIMS # 13024400 **Course # 9204**
Prerequisite: none
This course examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

Practicum in Human Services

Credit: 2 **Grade: 11-12**
PEIMS # 13025000 **Course # 9214**
Prerequisite: Two or more courses in a coherent sequence within the human services cluster.
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 Human Services provides background knowledge and occupation-specific training that focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community-services careers. Content for Practicum in Human Services is designed to meet the occupational preparation needs and interests of students and should be based upon the knowledge and skills selected from two or more courses in a coherent sequence in the human services cluster.



Level 1

Level 2 Cosmetology I

Level 3 Cosmetology II

Level 4 Teaching'etology III

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Cosmetology Operator License	Certified Aesthetic Laser Operator	Cosmetology/ Cosmetologist, General		
Cosmetology Esthetician Specialty License	Cosmetologist	Aesthetician/ Esthetician and Skin Care Specialist		
Cosmetology Manicurist Specialty License	Certified Spa Supervisor	Salon/Beauty Salon Management/ Manager		
Barber Operating License	Nail Technician/ Specialist and Manicurist	Cosmetology, Barber/Styling and Nail Instructor		

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
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%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Participation in a Career and Technical Student Organization such as TIVA, or SKILLS USA	Job shadow a cosmetologist Work part-time at a beauty salon, spa, or barbershop

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.

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

Successful completion of the Cosmetology and Personal Care Services regional program of study will fulfill requirements of the Public Service Endorsement. See the regions approved to offer this program of study at https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/regional-programs-of- study. Revised - July 2020.

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Cosmetology I Dual Credit

Credit: 2 (3 periods) **Grade: 10-11**
PEIMS # 13025200 **Weighted GPA Course # 9020**

Prerequisite: must meet all dual credit requirements
Located at Del Mar College
This course is an introduction to the field of cosmetology including the Texas Department of Licensing and Regulation cosmetology statues and rules.
CSME 1405 (fall)
This course offers the basic fundamentals of cosmetology. Topics include safety and sanitation, service preparation, manicure, facial, chemical services, shampoo, haircut, wet styling, and comb out.
CSME 1443 (spring)
This course continues with the presentation of the theory and practice of nail services. Topics include terminology, application, and workplace competencies in nail services.

Cosmetology II Dual Credit

Credit: 2 (3 periods) **Grade: 11-12**
PEIMS # 13025300 **Weighted GPA Course # 9050**

Prerequisite: Cosmetology I, co-registered in Cosmetology Lab, must meet all dual credit requirements
Located at Del Mar College
CSME 1310 (fall)
Fall begins with an introduction to the theory and practice of haircutting. Topics include terminology, implements, sectioning, and finishing techniques.
CSME 1224 and SME 1248 (spring)
The spring semester begins with an overview of the procedures and operations as related to salon management. Development procedures for appointment scheduling and record management, identifying issues related to inventory control, and operational management. Topics include the theory and practice of skin care, identifying the terminology related to skin treatments, demonstrating the proper application, and exhibiting workplace competencies in skin care.
*Upon successful completion of Cosmetology I and II, the student can continue with the intermediate and then advanced levels in the college program. **To continue on with this program, students must take summer classes at Del Mar College.*

Cosmetology III Dual Credit

Credit: 2 (3 periods) **Grade: 11-12**
PEIMS # 13025000 **Weighted GPA Course # 9055**

Prerequisite: CSME 1248, CSME 1354, CSME 1453, CSME 2401, must meet all dual credit requirements
Located at Del Mar College
CSME 2439 (fall)
Students will learn advanced concepts in the theory and practice of hair design.
CSME 2310 (fall)
Students will learn advanced concepts and practice haircutting. Topics will include haircuts utilizing scissors, razors, and/or clippers.
CSME 2337 (spring)
In this course, students will work towards mastery of advanced cosmetology techniques including hair designs, professional cosmetology services, and workplace competencies.
CSME 2441 (spring)
Students will prepare for the state licensing examination.

NAME: DMC STUDENT ID: HIGH SCHOOL:

Del Mar College – Early College Programs
Human Sciences and Education - Cosmetology Certificate

	COURSES	LECTURE HOURS	LAB HOURS	CREDIT HOURS	CONTACT HOURS	SEMESTER COMPLETED	GRADE
Semester: Fall	CSME 1405	2	8	4	160		
	TOTAL	**2**	**8**	**4**	**160**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	CSME 1443	2	8	4	160		
	TOTAL	**2**	**8**	**4**	**160**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Fall	CSME 1310	1	8	3	144		
	TOTAL	**1**	**8**	**3**	**144**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	CSME 1244	1	3	2	64		
	CSME 1248	1	4	2	80		
	TOTAL	**2**	**7**	**4**	**144**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Summer	CSME 1354	1	8	3	144		
	CSME 1453	2	8	4	160		
	CSME 2401	2	8	4	160		
	TOTAL	**5**	**24**	**11**	**464**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Fall	CSME 2439	2	8	4	160		
	CSME 2337	2	4	3	96		
	TOTAL	**3**	**16**	**7**	**304**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	CSME 2310	1	8	3	144		
	CSME 2441	2	8	4	160		
	TOTAL	**4**	**12**	**7**	**256**		
	TOTAL SEMESTER CREDIT HOURS:			**40**			

**1st Yr. Courses Taught: Mon thru Fri 8:30am-10:30am* **2nd Yr. Courses Taught: Mon thru Fri 10:30am-12:30pm*

MAJOR CODE: COSM.CER
REM LEVEL: Exempt

COST PER CREDIT HR: $33.33
(EXAMPLE: FIRS1407 =$133.32)

LAB FEES: $24 -$48
(Some courses may be subject to Lab Fees)

UNIFORM: Black Smock $45
Email Lissa Gonzalez for Details: lgonzale43@delmar.edu

1st Yr. Cosmo Kit: $372.11

Vendor: Marianna
(Vendor does NOT sell Direct to students)

Vendor Contact:
(800)228-9060

NOTE: Summer & 2nd Yr. students will need additional supplies.

For More Information Contact:
Business Administration & Entrepreneurship:
(361)-698-1782

Dual Credit Office:
(361)-698-1634

CSME 1405	CSME 1405. FUNDAMENTALS OF COSMETOLOGY A course in the basic fundamentals of cosmetology. Topics include safety and sanitation, service preparation, manicure, facial, chemical services, shampoo, haircut, wet styling, and comb out.
CSME 1443	CSME 1443. MANICURING AND RELATED THEORY Presentation of the theory and practice of nail services. Topics include terminology, application, and workplace competencies related to nail services
CSME 1310	CSME 1310. INTRODUCTION TO HAIRCUTTING AND RELATED THEORY An introduction to the theory and practice of hair cutting. Topics include terminology, implements, sectioning and finishing techniques.
CSME 1244	CSME 1244. INTRODUCTION TO SALON DEVELOPMENT (1-3-2) An overview of the procedures and operations as related to salon management.
CSME 1248	CSME 1248. PRINCIPLES OF SKIN CARE (1-4-2) Introduction of the theory and practice of skin care.
CSME 1354	CSME 1354. ARTISTRY OF HAIR DESIGN I (1-8-3) An introduction to hair design. Topics include the theory and applications of wet styling, thermal hair styling, and finishing techniques.
CSME 1453	CSME 1453. CHEMICAL REFORMATION AND RELATED THEORY (2-8-4) Presentation of the theory and practice of chemical reformation including terminology, application, and workplace competencies.
CSME 2401	CSME 2401. THE PRINCIPLES OF HAIR COLORING AND RELATED THEORY (2-8-4) Presentation of the theory, practice, and chemistry of hair color. Topics include terminology, application and workplace competencies related to hair color.
CSME 2439	CSME 2439. ADVANCED HAIR DESIGN (2-8-4) Advanced concepts in the theory and practice of hair design.
CSME 2337	CSME 2337. ADVANCED HAIRCUTTING AND RELATED THEORY (1-8-3) Advanced concepts and practice of haircutting. Topics include haircuts utilizing scissors, razor and/or clippers.
CSME 2310	CSME 2310. ADVANCED COSMETOLOGY TECHNIQUES (2-4-3) Mastery of advanced cosmetology techniques including hair designs, professional cosmetology services and workplace competencies.
CSME 2441	CSME 2441. PREPARATION FOR THE STATE LICENSING EXAMINATION (CAPSTONE) (2-8-4) Preparation for the state licensing examination.

Information Technology

COURSES

LEVEL 1 — Principles of Information Technology

LEVEL 2 — Computer Science I

LEVEL 3 — Web Design

LEVEL 4 — Project Based Research
Career Preparation

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Oracle Certified Associate Java SE 8	AEM 6 Developer	Computer Programming/Programmer, General	Web/ Multimedia Management and Webmaster	Computational Science
WD Certified Web Design Certification	Certified Webmaster Professional	Computer Science		
Microsoft Technology Associate Introduction to Programming Certifictions	Adobe Campaign Developer	Web Page, Digital/Multimedia and Information Resources Design		Information Science/ Studies
App Development with Swift Certification Level 1	IBM Certified Solution Developer - OpenSocial	Computer Systems Networking and Telecommunications		

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
Computer Network Architects	$111,633	1,079	39%
Web Administrators, Computer Occupations	$85,197	1,616	20%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Join TSA
Participate in a coding or computer programming club
Create a web page

Work Based Learning Activities:
Get an Oracle or CISCO Certification

The Web Development program of study explores the occupations and educational opportunities associated with designing, creating, and modifying websites. This program of study may also explore integrating websites with other computer applications, and converting written, graphic, audio, and video components to compatible web formats by using software designed to facilitate the creation of web and multimedia content.

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

Successful completion of the Web Development program of study will fulfill requirements of a Business and Industry Endorsement.
Approved Statewide Program of Study September 2019

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Principles of Information Technology

Credit: 1 **Grade: 9-10**
PEIMS # 13027200 **Course # 7036**
Prerequisite: none
This course provides students with a wide variety of information technology skills. Career exploration, technology skills in the workplace, beginning web page design, and introductory flash animation are all integral parts of this course. Utilize this course to determine your future interests in the Information Technology field.

Computer Science I

Credit: 1 **Grade: 10-12**
PEIMS # 03580200 **Course # 7040**
Prerequisite: none
Computer Science I is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, recursion, and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

Web Design

Credit: 1 **Grade: 9-12**
PEIMS # 03580820 **Course # 7080**
Prerequisite: none
This course focuses on web design using XHTML and other authoring tools with emphasis on meeting current W3C standards. Students will also learn about important design concepts, form creation, basic scripting, and publishing. There will also be an introduction to web graphics and animation.

Project Based Research (first time taken)

Credit: 1 **Grade: 11-12**
PEIMS # 12701500 **Course # 921122**
Prerequisite: none
Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Career Preparation I

Credit: 2 **Grade: 11-12**
PEIMS # 12701300 **Course # 9080**
Prerequisite (district): at least 16 years of age, application required (due to limited spacing)
This work based instructional arrangement develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved career and technology training area. This course introduces students to general employability skills and concepts including human relations and personality development, business ethics, management principles, business communications, basic computer applications, and personal and business management. In addition, each student will have an individual training plan that will address the necessary skills and knowledge needed for that student's specific career training. Students who are planning to take a cooperative program should read the following important notes. The cooperative program includes one hour of class instruction and a one-hour work pass for on-the-job training each day. A minimum of fifteen hours per week is required. Due to state requirements, students without previous cooperative work program experience will not be admitted at the semester. Application for the cooperative program is available from the teacher. Complete and return the application to the teacher.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Law, Public Safety, and Security

COURSES

LEVEL 1

LEVEL 2

Principles of Law, Public Safety,Corr. & Security

LEVEL 3

Firefighter I
Emergency Medical Technician - Basic
Anatomy and Physiology

LEVEL 4

Firefighter II
Project-Based Research

POSTSECONDARY OPTIONS

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

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
Firefighters	$50,149	2,309	13%
Fire Inspectors and Investigators	$54,787	161	14%
Emergency Medical Technicians	$34,091	1,880	31%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Attend local emergency awareness events; Texas Public Service Association

Work Based Learning Activities:
Volunteer at a hospital or a fire station

The Emergency Services program of study focuses on training students to respond to emergency situations, namely medical emergencies andfire-based emergencies.Students may learn how to preventemergencies, respondappropriately and in accordancewith rules and regulations during crises, and investigate and delineate the source of the emergency.

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

Successful completion of the Emergency Services program of study will fulfill requirements of the Public Service Endorsement.
Approved Statewide Program of Study - September 2019

Principles of Law, Public Safety, Corrections and Security Dual Credit

Credit: 1 **Grade: 10-12**
PEIMS # 13029200 **Weighted GPA Course # 9383**

Prerequisite: must meet all dual credit requirements
CRIJ 1310 (spring):
This course is a study of the nature of criminal law, philosophical and historical development, major definitions and concepts, classification of crime, elements of crimes and penalties using Texas statues as illustrations, and criminal responsibility.

Forensic Science **Credit: 1.0**
PEIMS: 13029500
Local Code: 3350
Grade: 11-12
Prerequisite: Biology and Chemistry

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. This course satisfies a high school science graduation requirement.

Firefighter l Dual Credit

Credit: 2 (3 periods) **Grade: 11-12**
PEIMS # 13029900 **Weighted GPA Course # 8990**

Prerequisite: must meet all dual credit requirements
Classes located at Del Mar:
This is the first four of the courses in the series in the basic preparation for a new firefighter to satisfy the TCFP curriculum for Basic Structural Fire Suppression, Course # 100. One must take the series of courses concurrently to satisfy the TCFP curriculum for Basic Structural Fire Suppression, Course # 100. *** These courses may be offered only by institutions licensed as a fire academy by the TCFP. Good physical condition, clean criminal history, and a medical physical are required prior to admittance to the program. Students will be financially responsible for uniform and rental of firefighting equipment.
Courses include FIRS 1301, FIRS 1407, FIRS 1313, and FIRST 1319. Students are encouraged to take EMT courses through the summer between their first and second year. GPHS does not pay for summer courses, so these courses are not mandatory.

Practicum in Health Science for Emergency Medical Technician- Basic Continuing Education (first time taken)

Credit: 2 (3 periods) **Grade: 11-12**
PEIMS # 13020500 **Weighted GPA Course # 8920**

Prerequisite: Health Science Theory, Biology, must meet all dual credit requirements
Located at Del Mar College
This course is the preparation for certification as an Emergency Medical Technician (EMT) Basic. The course includes all the skills necessary to provide emergency medical care at a basic life support level with an emergency service or other specialized services. The course also includes a basic type of health profession work-based instruction that helps students synthesize new knowledge, apply new knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to the theory. Close and/or direct supervision is provided by the clinical professional generally in a clinical setting. Clinical education is an unpaid learning experiences and requires clinical time in addition to class time. Students are required to purchase uniforms and equipment and must meet JCAHO requirements. Classes include EMSP 1501 and EMSP 1160 (both spring).

Firefighter II Dual Credit

Credit: 3 (3 periods) **Grade:11-12**

PEIMS # 13030000 **Weighted GPA Course # 8995**

Prerequisite: concurrent enrollment with Firefighter I, must meet all dual credit requirements

Classes located at Del Mar:

This is the next four of the courses in basic preparation for a new firefighter to satisfy the TCFP curriculum for Basic structural Fire Suppression, Course #100.

To complete the Basic Firefighter Certificate, students must also complete EMSP 1501 Emergency Medical Technician Basic and EMSP 2160 Clinical after high school graduation. To be hired as a firefighter, a dean criminal background check is required. *** These courses may be offered only by institutions licensed as a fire academy by the TCFP. Good physical condition, clean criminal history, and a medical physical are required prior to admittance to the program. Students will be financially responsible for uniform and rental of firefighting equipment. Courses include FIRS 1323, FIRS 1329, FIRS 1103, and FIRST 1433. The last semester of fire classes during the student's second year will require them to attend mandatory burns during the month of April that usually take all day.

NAME: DMC STUDENT ID: HIGH SCHOOL:

Del Mar College – Early College Programs
Emergency Medical Technician Certificate

	COURSES	LECTURE HOURS	LAB HOURS	CREDIT HOURS	CONTACT HOURS	SEMESTER COMPLETED	GRADE
Semester: Spring	EMSP 1501	3	7	5	160		
	EMSP 1160	0	6	1	96		
	TOTAL	**3**	**7**	**5**	**160**		

EMSP 1501	EMSP 1501. EMERGENCY MEDICAL TECHNICIAN - BASIC Preparation for certification as an Emergency Medical Technician (EMT).
EMSP 1160	EMSP 1160. CLINICAL Health -related work-based learning experience that enables students to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Corequisite: EMSP 1501

MAJOR CODE: EMTC. CER2
EMT REM Level: 3-3-2

COST PER CREDIT HR: $33.33
(EXAMPLE: FIRS1407 =$133.32)
LAB FEES: $24 -$48
(Some courses may be subject to Lab Fees)
UNIFORM: Shirts can be purchased at Stitch-IT

For More Information Contact:
Public Safety Department:
361-698-1724
Dual Credit Office:
361-698-1634

NAME: DMC STUDENT ID: HIGH SCHOOL:

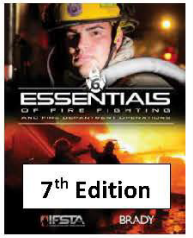
Del Mar College – Early College Programs
Basic Firefighter Certificate

	COURSES	LECTURE HOURS	LAB HOURS	CREDIT HOURS	CONTACT HOURS	SEMESTER COMPLETED	GRADE
Semester: Fall	FIRS 1301	2	3	3	80		
	FIRS 1407	2	6	4	128		
	TOTAL	**4**	**9**	**7**	**208**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	FIRS 1313	1	5	3	96		
	FIRS 1319	2	3	3	80		
	TOTAL	**3**	**8**	**6**	**176**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Summer	FIRS 1323	2	5	3	112		
	FIRS 1329	2	3	3	80		
	FIRS 1433	2	6	4	128		
	FIRS 1103	1	1	1	32		
	TOTAL	**3**	**13**	**6**	**256**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Fall	HPRS 1106	**Continuing Education Course** *Online Class					
	TOTAL	**No College Credit**					
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	EMSP 1501	3	7	5	160		
	EMSP 1160	0	6	1	96		
	TOTAL	**3**	**7**	**5**	**160**		
	TOTAL SEMESTER CREDIT HOURS:	**30**					

**Firefighter classes are taught from 8:30am - 10:30am Monday thru Friday*
11th and 12th Grade students ONLY

MAJOR CODE: FIFT.CER2
FIRE REM LEVEL: 3-2-1
EMT REM Level: 3-3-2

COST PER CREDIT HR: $33.33
(EXAMPLE: FIRS1407 =$133.32)
LAB FEES: $24 -$48
(Some courses may be subject to Lab Fees)
UNIFORM: Shirts can be purchased at Stitch-IT
PROTECTIVE GEAR: Approx. Rental Cost: $600 (Required in last semester for live fire training)



Required Text Book
ISBN: 978-0-87939-657-2
Required Work Book
ISBN: 978-0-87939-660-2
NOTE: Check with your High School to see if they will provide or if you must purchase yourself.

For More Information Contact:
Public Safety Department:
361-698-1724
Dual Credit Office:
361-698-1634

Manufacturing

COURSES

LEVEL 1
Principles of Applied Engineering (Can be taken in 8th Grade)

LEVEL 2
Robotics I

LEVEL 3
Robotics II

LEVEL 4
Engineering Design and Problem Solving (Robotics III)

Practicum in Manufacturing

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	ER / AL ROFES AL DEGR
FANUC Robot Operator 1	Engineer, Professional	Electro- mechanical Engineering/ Technology	Electrical Engineering	
Mastercam Associate Level Certification	PMMI Mechatronics: Programmable LogicControllers1	Robotics Technology/ Technician	Engineering, General	
NCCER Industrial Maintenance Mechanic	Certified Quality Technician	Instrumentation Manager	Industrial Engineering	
NIMS Industrial Technology Maintenance - Maintenance Operations	Plant Maintenance Technologist	Industrial Mechanics and Maintenance Technology	Mechanical Engineering	

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
Electro-Mechanical Assemblers	$30,160	951	9%
Electro-Mechanical Technicians	$56,555	127	9%
Industrial Machinery Mechanics	$49,816	3,788	27%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Participate in SkillsUSA and local STEM events

Work Based Learning Activities:
Apprenticeship at a lo cal business or industry
American Welding Society

The Advanced Manufacturing and Machinery Mechanics program of study focuses on the assembly, operation, maintenance, and repair of electromechanical equipment or devices. Students may work in a variety of mechanical fields, gaining knowledge and experience in robotics, refinery and pipeline systems, deep ocean exploration, or hazardous waste removal. CTE concentrators may work in a variety of fields of engineering.

The Manufacturing Career Cluster® focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Successful completion of the Advanced Manufacturing and Machinery Mechanics program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Principles of Applied Engineering (Robotics 1st Level)

Credit: 1 **Grade: 9-10**
PEIMS # 13036200 **Course # 9632**

This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course. Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and will be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

Robotics I (Robotics 2nd Level)

Credit: 1 **Grade: 9-12**
PEIMS # 13037000 **Course # 9633**

Prerequisite: none

This course is designed for the very outstanding STEM student. Materials will be presented at an accelerated rate with more emphasis on real world problems. This course is designed to challenge the student who has a strong interest and ability in the study of STEM fields.

In Robotics I, students will transfer academic skills to component designs in an introductory project-based environment through implementation of the engineering design process. Students will learn how to build prototypes or use simulation software to test their designs. Students will work in groups to build and test increasingly more complex mobile robots, culminating in an end-of-semester robotics contest. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Robotics II (Robotics 3rd Level)

Credit: 1 **Grade: 10-12**
PEIMS # 13037050 **Course # 9634**

Prerequisite: Robotics I

This course is designed for the very outstanding STEM student. Materials will be presented at an accelerated rate with more emphasis on real world problems. This course is designed to challenge the student who has a strong interest and ability in the study of STEM fields.

In Robotics II, students will apply academic skills learned in the previous course to implement designs for real world problems in a project-based environment through the engineering design process. The course will focus heavily in prior knowledge from other STEM courses. Students will design prototypes and use simulation software to test the applications of their designs. Students will work in groups to build and test increasingly more complex mobile robots, culminating in an end-of-semester robotics contest. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Engineering Design and Problem Solving (Robotics 4th level)

Credit: 1 **Grade: 11-12**
PEIMS # 13037300 **Course # 9637**
Prerequisite: Algebra I, Geometry

This course is designed for the very outstanding STEM student. Materials will be presented at an accelerated rate with more emphasis on real-world problems. This course is designed to challenge the student who has a strong interest and ability in the study of STEM fields.
Engineering Design and Problem Solving is the third or fourth course on the STEM Pathway. Students in this course will be exposed to authentic engineering practices in a project-based learning (PBL) environment. In this course, learning will be scaffolded over a series of engaging and socially relevant explorations and design challenges. The curriculum will focus on creating a 1) narrative of engineering, 2) building engineering design skills, 3) developing engineering habits of mind, and 4) introducing engineering fields and professions 5) utilizing engineering design tools and diagrams to create a product. Additionally, students will explore career opportunities, employer expectations, and educational needs in engineering.
This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.

Practicum in Manufacturing (Robotics 5th Level)

Credit: 2 **Grade: 11-12**
PEIMS # 13033000 **Course # 9638**

This course is recommended for students in Grade 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Manufacturing 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.

Manufacturing

COURSES

LEVEL 1

Introduction to Welding
(High School Credit Only)
(I credit)

LEVEL 2

Welding I DC - (2 high school credits)
(Fall WLDG 1407 4 credit hrs.)
(Spring WLDG 1521 5 credit hrs.)
Professional Communications *(1 hs credit)*
(COMG 1391 3 credit hrs.)

LEVEL 3

Welding II DC – (2 high school credits)
(Fall WLDG 1557 5 credit hrs.)
(Spring WLDG 1435 4 credit hrs.)
TECM 1301 (1.0 high school credit)(3 credit hours)/
Welding Safety WLDG 1323 **-** (.5 high school credit)
(credit)(3 credit hours)

LEVEL 4

Welding III DC (Practicum in Manufacturing)
(2 high school credits)
(Fall WLDG 2406 4 credit hrs.)
Spring WLDG 2453 4 credit hrs.)

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
AWS Certified Welder, D1.1, D9.1	Certified Welder or Welder Inspector	Welding Technology/ Welder	Welding Engineering Technology/ Technician	
ASW SENSE Level 1	Machining Level 1 - CNC Milling: Programming Setup & Operations	Machine Shop Technology/ Assistant	Biomedical Technology/ Technician	Occupational Health and Industrial Hygiene
API 1104 Welding Certificate	Certified Welding Engineering	Operations Management and Supervision		
NCCER Welding, Level 1	Certified Environmental, Safety, and Health Trainer	Occupational Safety and Health Technology/ Technician	Environmental Health	

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
Welders, Cutters, Solderers, and Brazers	$41,350	6,171	9%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Participate and compete e in SkillsUSA
Job shadow a machinist t

Work Based Learning Activities:
Apprenticeship at a loc al business or industry
American Welding Society

The Welding program of study focuses on the development and use of automatic and computer-controlled machines, tools, and robots that perform work on metal or plastic. Students will learn how to modify parts to make or repair machine tools or maintain individual machines, and how to use hand-welding or flame-cutting equipment.

The Manufacturing Career Cluster® focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Successful completion of the Manufacturing Technology program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Introduction to Welding (G-P Course Only – Not DC)

Credit: 1 **Grade: 9-10**
PEIMS # 13032250 **Course # 9641**

Introduction to Welding will provide an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Students will be introduced to the three basic welding processes. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. Introduction to Welding will provide students with the knowledge, skills, and technologies required for employment in welding industries. Students will develop knowledge and skills related to welding and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills will prepare students for future success.

Welding I Dual Credit (Del Mar Introduction to Welding 1407 / Welding Fundamentals 1521)

Credit: 2 (2 periods) **Grade: 10-12**
PEIMS # 13032300 **Weighted GPA Course # 9639**
Prerequisite: must meet all dual credit requirements

This course includes the Introduction to Shielded Metal Arc Welding process and introduction to Pipe Welding. During the intro to Shielded Metal Arc, emphasis will be placed on power sources, electrode selection, oxy-field cutting, and various joint designs. During the Intro to Pipe Welding, students will use the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis will be placed on weld positions IG and 2G using various electrodes.

Welding II Dual Credit (Del Mar Welding Intermediate SMAW 1557 / Intro to Pipe Welding 1435)

Credit: 2 (2 periods) **Grade: 11-12**
PEIMS # 13032400 **Weighted GPA Course # 9640**
Prerequisite: Welding I, must meet all dual credit requirements
Recommendation: Algebra I or Geometry

This course includes Intermediate Shielded Metal Arc Welding and Advanced Shielded Metal Arc Welding. It will include a study of the production of various fillets and groove welds as well as preparation specimens for testing in all positions. Advanced topics will be based on welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions will also occur.

Industrial Math Dual Credit

Credit: 1.0 **Grade: 9-12**
PEIMS # 12701410 **Weighted GPA Course # 2745**
Prerequisite: Dual Credit Requirements
TECM1301: This class focuses on math skills applicable to industrial occupations and includes fractions, decimal manipulation, measurement, percentage, problem solving techniques for equations, and ratio/proportion application. (For students enrolled in DMC Welding Program)

Welding III (Practicum in Manufacturing) (Del Mar Welding Intermediate Pipe Welding 2406 / Advanced Pipe Welding 2453)

Credit: 2 **Grade: 11-12**
PEIMS # 13033000 **Weighted GPA Course #9650**
This course is recommended for students in Grade 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Manufacturing 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.

Welding Safety, Tools, and Equipment Continuing Education (Occupational Safety & Environmental Technology I)

Credit: .5 (1 period) **Grade: 10-12**

PEIMS # N1303680 **Weighted GPA Course # 9640B**

Prerequisite: must meet all dual credit requirements

WLDG 1323 (spring):

This class is an introduction to welding careers, equipment, and safety practices including OSHA standards for industry.

Speech DC (COMG 1391)

Credit: .5 (1 period) **Grade: 10-12**

PEIMS # 13009900 **Weighted GPA Course # 8427**

Prerequisite: must meet all dual credit requirements

COMG 1391 (spring):

This is a DC speech communications class for DMC Welding students.

NAME: DMC STUDENT ID: HIGH SCHOOL:

MAJOR CODE: WINC.CER
REM LEVEL: Exempt

Del Mar College – Early College Programs
Intermediate Welding Certificate (WINC.CER) At WEST CAMPUS

	COURSES	LECTURE HOURS	LAB HOURS	CREDIT HOURS	CONTACT HOURS	SEMESTER COMPLETED	GRADE
Semester: Fall	WLDG 1407	2	8	4	160		
	TOTAL	**2**	**8**	**4**	**160**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	WLDG 1521	2	9	5	176		
	COMG 1391	3	0	3	48		
	TOTAL	**5**	**9**	**8**	**224**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Fall	WLDG 1557	2	9	5	176		
	TECM 1301	3	0	3	48		
	TOTAL	**5**	**9**	**8**	**224**		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Semester: Spring	WLDG 1435	2	8	4	160		
	WLDG 1323	3	1	3	64		
	TOTAL	**5**	**9**	**7**	**224**		
	TOTAL SEMESTER CREDIT HOURS:		**27**				

Required Text Book:
WLDG 1407 / 1521 / 1557 / 1435
Welding Principles and Applications, Larry Jeffus, 8th Edition
ISBN: 1305494695 New $105.00

WLDG: 1323
Core Curriculum: Introductory to Craft Skills 5th Ed.
ISBN: 13:978-013-413143-6 **New** $40.00
NOTE: Check with your High School to see if they will provide or if you must purchase yourself.

TOOLS FOR WELDING 1407,1521,1435,1557:

- 250 AMP Electrode Holder with at least 5ft welding lead (whip)
- Weld Cable Connector- Male 1/0
- Crescent wrench- 10" or larger
- Vise Grip 9" (2)
- Friction Lighter (Striker)
- Welding Leather Gloves
- Chipping Hammer, Steel Handle
- Gas cutting tip cleaner
- Oxy-fuel cutting lens and face-shield combo
- Welding Jacket
- Welding hood, filter lens and cover lens half round file, 14", wire brush, wood handle, 4" grinder
- Measuring tape 12" or less
- Tool box or 5 gallon plastic bucket
- Safety glasses (OSHA Approved)
- Ear Plugs
- Welding Caps

Estimated Cost: $160.00

COST PER CREDIT HR: $33.33
LAB FEES: $24 -$48
(Some courses may be subject to Lab Fees)
UNIFORM:
-Steel Toed Boots (Leather, no laces)
-Denim Pants
-Welding (Long Sleeve)

For More Information Contact:
Welding Applied Technology:
(361)-698-1715
Dual Credit Office:
(361)-698-1634

Class INFO: DMC West Campus
Mon. thru Thurs. 1:15pm – 4pm

Science, Technology, Engineering, and Math

COURSES

LEVEL 1
Fundamentals of Computer Science

LEVEL 2
Computer Science I
Game Programming and Design

LEVEL 3
Computer Science II

LEVEL 4
Independent Study in Tech Apps

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Oracle Certified Association JAVA SE 8 Programmer	Certified Computing Professional	Computer Programming/Pro gamer General	Management Information Systems, General	
Oracle Certified Database Associate	Cloud Technology Associate Certification	Computer Software Engineer		
	AEM 6 Developer	Computer Science		
	Certified Software Analyst	Information Science/Studies		

*Includes Level I and Level II Certificates

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Computer Network Architect	$111, 633	1,454	9%
Software Developer, Systems Software	$103, 334	2985	25%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Join TSA Participate in a coding club at school	Obtain an industry based certification.

For more information on postsecondary options for this programs of study, visit TXCTE.org

ucation opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer applications to run

Successful completion of the Programming and Software Development program of study will fulfill requirements of a Business and Industry or STEM Endorsement.

Approved Statewide Program of Study-

September 2019

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

Educate. Inspire. EMPOWER

Fundamentals of Computer Science

Credit: 1 Credit **Grade: 9-10**
PEIMS # 03580140 **Course # 7038**
Prerequisite: None

Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. By using computer science 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 gain an understanding of the principles of computer science through the study of technology operations and concepts. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

Game Programming and Design

Credit: 1 Credit **Grade: 9-12**
PEIMS # 03580380 **Course # 7039**
Prerequisite: Algebra I

Students shall be awarded one credit for successful completion of this course. Prerequisite: Algebra I. This course is recommended for students in Grades 9-12. 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

Computer Science I

Credit: 1 **Grade: 10-12**
PEIMS # 03580200 **Course # 7040**
Prerequisite: none

Computer Science I is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, recursion, and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

Computer Science II

Credit: 1 **Grade: 11-12**
PEIMS # 03580300 **Course # 7041**
Prerequisite: Computer Science I

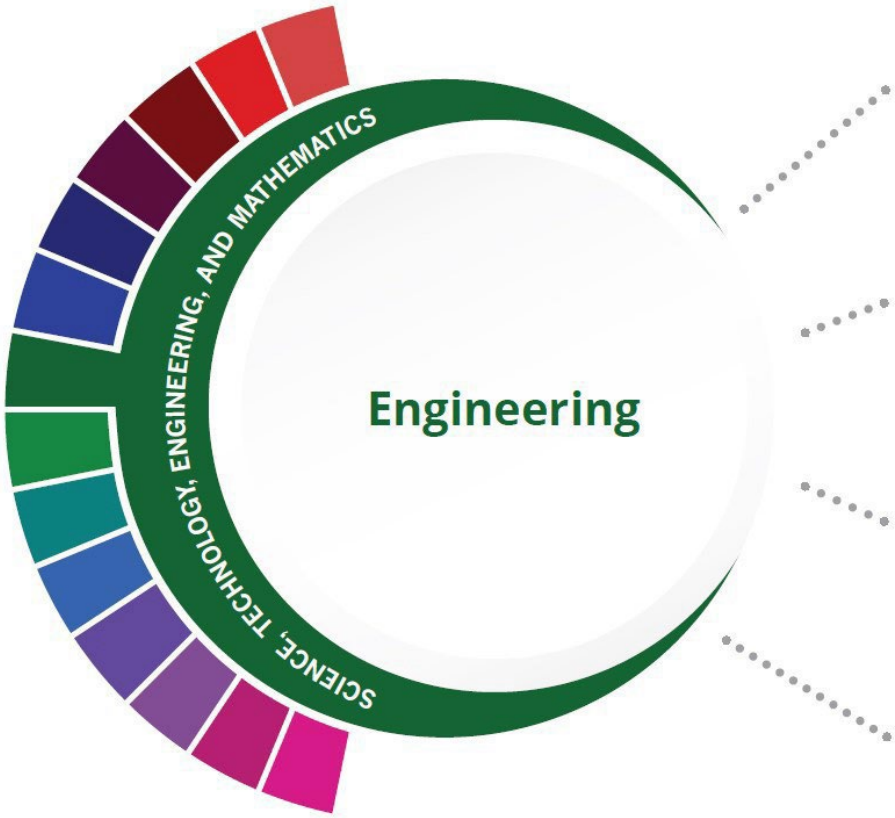
Computer Science II expands student knowledge and skills in structured programming techniques and concepts by addressing programs that are more complex and by developing comprehensive programming solutions. This course will give students the opportunity to explore several important topics of computing using their own ideas and creativity. This course also enhances logical problem-solving skills by creating programs to perform business, math, and science related tasks.

Independent Study in Tech Apps

Credit: 1 **Grade: 9-12**

PEIMS # 03580900 **Course #** 7042

In Independent Study in Technology Applications, through the study of technology applications foundations, including technology-related terms, concepts, and data input strategies, students will communicate information in different formats and to diverse audiences using a variety of technologies. Students will learn to make informed decisions; develop and produce original work that exemplifies the standards identified by the selected profession or discipline; and publish the product in electronic media and print. Students will practice the efficient acquisition of information by identifying task requirements, using search strategies, and using technology to access, analyze, and evaluate the acquired information. By using technology as a tool that supports the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.



Level 1 Principles of Applied Engineering

Level 2 Robotics I

Level 3 Engineering Design and Presentation I (DC ENGR 1201)

Level 4 Scientific Research and Design

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Autodesk Certified Professional or User (ACU)-Inventor	Engineer, Professional	Electrical and Electronics Engineering	Electrical and Electronics Engineering	Electrical and Electronics Engineering
Certified SolidWorks Associate (CSWA)	Fluid Power Systems Designer	Drafting and Design Technology/ Technician, General	CAD/CADD Drafting and/or Design Technology/ Technician	Mechanical Engineering
Certified Engineering Technician-Audio Systems	Certified Biomedical Auditor	Engineering Technology	Bioengineering and Biomedical Engineering	Bioengineering and Biomedical Engineering
	Certified Cost Estimator/ Analyst		Construction Engineering Technology/ Technician	

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 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	10%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Participate in competitions like Skills USA	Engineering internship Job shadow a machinist

The Engineering program of study focuses on the design, development, and use of engines, machines, and structures. CTE learners will learn how to apply science, mathematical methods, and empirical evidence to the innovation, design, construction, operation, and maintenance of different manufacturing systems.

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

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

Principles of Applied Engineering (Robotics 1st Level)

Credit: 1 **Grade: 9-10**
PEIMS # 13036200 **Course # 9632**

This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course. Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and will be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

Robotics I (Robotics 2nd Level)

Credit: 1 **Grade: 9-12**
PEIMS # 13037000 **Course # 9633**

Prerequisite: none

This course is designed for the very outstanding STEM student. Materials will be presented at an accelerated rate with more emphasis on real world problems. This course is designed to challenge the student who has a strong interest and ability in the study of STEM fields.

In Robotics I, students will transfer academic skills to component designs in an introductory project-based environment through implementation of the engineering design process. Students will learn how to build prototypes or use simulation software to test their designs. Students will work in groups to build and test increasingly more complex mobile robots, culminating in an end-of-semester robotics contest. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. *This is a co-curricular class and will have a grade based on outside participation in addition to classroom work.*

Engineering Design and Presentation (Concepts of Engineering Dual Credit)

Credit: 1 **Grade: 11-12**
PEIMS # 13036500 **Weighted GPA Course # 9630**

Prerequisite: Precalculus or concurrent enrollment, must meet all dual credit requirements

Introduction to Engineering – ENGR 1201 (fall)

This course introduces engineering as a discipline and a profession. This course includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society.

Engineering Graphics I – ENGR 1304 (spring)

This course introduces methods of graphical communications, working drawings for engineering and production, data analysis, technical reports, and computer graphics. Equal emphasis will be placed on computer-assisted design and traditional mechanical drafting techniques.

Scientific Research and Design

Credit: 1 **Grade: recommended 11-12**
PEIMS # 13037200 **Course # 3334**

Prerequisite: Biology, Chemistry, IPC, or Physics

Recommendation: Physics, Physics Advanced, or Physics Advanced Placement I or II

Scientific Research and Design is a broad-based course that engages students in a program that explores the complexities of science topics and issues. The course has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundation, literary, and philosophical texts, listening to and viewing speeches, broadcasts, and personal accounts. Students learn to synthesize information from these multiple sources, develop their own perspectives in written essays, and design research projects. Student findings will be delivered in oral and visual presentations, both individually and as part of a team.

Transportation and Logistics

COURSES

LEVEL 1

LEVEL 2

LEVEL 3

Automotive Technology I

LEVEL 4

Automotive Technology II / Lab
Career Preparation I

POSTSECONDARY OPTIONS

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

Additional industry based certification information is available from the TEA CTE website.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Automotive Body and Related Repairers	$40,14 4	1,456	25%
Automotive Service Technician and Mechanics	$38,45 9	5,557	18%

For more information on postsecondary options for this program of study, visit TXCTE.org.

he Automotive program of study teaches students how to repair and refinish automobiles and service various types o f ehicles. Students may learn to collect payment for services or supplies and perform typical vehicle maintenance rocedures such as lubrication, oil changes, installation of antifreeze, or replacement of accessories like wiper blade s o

res

Successful completion of the Automotive program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Automotive Technology I Continuing Education (Automotive Technology I: Maintenance and Light Repair)

Credit: 2 (3 periods) **Grade: 10-12**
PEIMS # 13039600 **Weighted GPA Course # 9000**

Prerequisite: must meet all dual credit requirements
Located at Del Mar College
AUMT 1405 (fall)
This course is an introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and basic automotive maintenance.
AUMT 1407 (spring)
This course is an overview of automotive electrical systems including topics in operational theory, testing, diagnosis, repair of charging and starting systems, and electrical accessories.

Automotive Technology II Continuing Education (Automotive Technology II: Automotive Services)

Credit: 2 (3 periods) **Grade: 11-12**
PEIMS # 13039700 **Weighted GPA Course # 9010**

Prerequisite: must meet all dual credit requirements, Automotive Technology I
Located at Del Mar College
All three courses need to be taken, and it is preferred to take AUMT 2301 in the spring
AUMT 1410 (fall)
This course focuses on the operation and repair of the drum/disc type brake systems. The class will cover topics such as brake theory, diagnosis, repair of power, manual, anti-lock brake systems, and parking brakes.
AUMT 1316 (spring):
Students will learn about the diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. This course also includes component repair, alignment procedures, and tire and wheel service. This course may be taught manufacture specific.
AUMT 2301 (fall or spring)
This course focuses on the diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Topics also include component repair, alignment procedures, tire and wheel service, a study of human and customer relations, and customer satisfaction in the automotive industry. An emphasis will be placed on management and building relationships between the service department and the manager.

NAME: **DMC STUDENT ID:** **HIGH SCHOOL:**

Del Mar College – Early College Programs
Automotive Suspension, Driveline, Brake Specialist (Level 1 Certificate)

	COURSES	LECTURE HOURS	LAB HOURS	CREDIT HOURS	CONTACT HOURS	SEMESTER COMPLETED	GRADE
Grade 10th /11th Fall	AUMT 1405*	2	6	4	128		
	COMG 1391	3	0	3	48		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Grade 10th /11th Spring	AUMT 1407*	2	6	4	128		
	AUMT2301***	3	0	3	48		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Grade 11th /12th Fall	AUMT 1316**	1	7	3	1		
	TECM 1301	3	0	3	48		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
Grade 11th /12th Spring	AUMT 1410**	2	6	4	128		
	COURSES	**LECTURE HOURS**	**LAB HOURS**	**CREDIT HOURS**	**CONTACT HOURS**	**SEMESTER COMPLETED**	**GRADE**
SUMMER	WLDG 1307	1	4	3	80		
	TOTAL SEMESTER CREDIT HOURS:			**27**			

** Dual Credit Classes taught 10:30am to 12:30pm Monday – Thursday on DMC West Campus*
*** Dual Credit Classes taught 1:15pm to 3:15pm Monday – Thursday on DMC West Campus*
****Taught 10:30am to 1:30pm FRIDAY Spring Semester on DMC West Campus*
NOTE: Since classes are taught Monday – Thursday, students can use FRIDAYS in High School Computer Labs to take COMG & TECM

MATH 1314 can substitute for TECM 1301
ENGL 1301 can substitute for COMG 1391

MAJOR CODE: AUSD.CER1

TSI: Exempt
COST PER CREDIT HR: $33.33
(EXAMPLE: FIRS1407 =$133.32)
LAB FEES: $24 -$48
(Some courses may be subject to Lab Fees)

For More Information Contact:
Technology Education Department:
361-698- 1725
Dual Credit Office:
361-698-1634

Last Revised 3/23/2021

The Texas Education Agency's (TEA) Pathways in Technology Early College High Schools (P-TECH) initiative offers an open-enrollment program that creates workforce pathways aligned with high-demand, high-wage fields throughout the state. Students enrolled in the P-TECH program work toward an associate degree while gaining hands-on work experience.

Gregory-Portland High School is a P-TECH (Pathways in Technology Early College High School) dedicated to supporting students who are on a pathway for future success through high school and/or college. Through this P-TECH program, our Wildcats are provided the opportunity to earn dual credit, which is credit toward a high school diploma and college degree. By the time they complete high school, students can earn free college credit leading to an associate degree, a Level 1 Certificate, and/or an Industry Based Certification.

G-PISD partners with Del Mar College to enable students to earn college credit. Our P-TECH program is focused on the healthcare industry, and students may earn industry-based certifications in: Phlebotomy, Patient Care Technician, EMT, CNA, and EKG. In addition, we are offering a pathway to LVN program in which students will be ready to enroll in nursing school for their senior year of high school. See the next two pages in this course guide for degree plans. (Information can also be found in the Health Science section of the course guide.)

P-TECH schools enable students to:

- Earn credit toward an Associate degree - tuition free while in high school.
- Eliminate thousands of dollars in college tuition costs.
- Graduate from a four-year university in less time than their peers.
- Enter the job market with work-ready skills.
- Develop workplace skills through mentorships and internships with industry partners.

The first cohort of students to begin the P-TECH program at G-PHS are the incoming freshmen of 2022-2023 *(Graduating class of 2026).* P-TECH programs are open-enrollment. For application information please see our P-TECH website at: https://www.g-pisd.org/ptech

Gregory-Portland P-TECH High School Health Science Continuing Ed with Del Mar College

GRADE LEVEL	High School Credit Courses		Continuing Ed Courses	Important Requirements
9	English I	1 Credit		**Spring Semester** **Apply to Del Mar** • **Take TSI** • **Schedule Advising Appointment** •
	Algebra I or Geometry	1 Credit		
	World Geography	1 Credit		
	Biology	1 Credit		
	Foreign Language	1 Credit		
	Principles of Health Science	1 Credit		
	PE	1 Credit		
10	English II	ICredit	**Fall Semester** **HPRS 1006 / HPRS 1005** **Spring Semester** **ECRD 1011**	
	Geometry or Algebra II	ICredit		
	World History	ICredit		
	Chemistry	ICredit		
	Foreign Language II	ICredit		
	Health Science Theory/Clinical(Med Term/EKG)	2Credits		
	Art	ICredit		
11	English III	1 Credit	**Fall Semester** **PLAB 1023** **Spring Semester** **NUPC 1020**	****Industry Based Certifications Available:** • **EKG** • **Phlebotomy** • **Patient Care Tech** • **Certified Medical Assistant** • **Emergency Medical Technician - Basic** • **Certified Nurse Aide**
	Algebra II /Pre-Cal	1 Credit		
	Anatomy /Physiology	1 Credit		
	US History	1 Credit		
	Health Science Practicum (Ph Ie b/ PCTI	2 Credit		
12	English IV	ICredit	**Fall Semester** **CMA** **Spring Semester** **EMSP 1501/EMSP 1160 OR** **NURA 1001 / NURA 106**	
	4th Math	ICredit		
	4th Science	ICredit		
	Government/ Economics	.5/ .5 Credits		
	Health Science Practicum II (CMA/ EMT or CNA)	2 Credits		
Key= Yellow- CTE Courses Green - DC Courses	27 Credits Foundation with Endorsement (Public Services)			

Gregory-Portland P-TECH High School Pathway to LVN with Del Mar College

GRADE LEVEL	High School Credit Courses		Dual-Credit Courses	Important Requirements
9	English I	1 Credit		**Spring Semester** • Apply to Del Mar • Take TSI • Schedule Advising Appointment • Review VN Requirements
	Algebra I or Geometry	1 Credit		
	World Geography	1 Credit		
	Biology	1 Credit		
	Foreign Language	1 Credit		
	Fine Art	1 Credit		
	PE	1 Credit		
10	English II	1 Credit	Psyc 2301(Fall)/SPCH 1315 (Spring)	
	Geometry or Algebra II	1 Credit		
	World History	1 Credit		
	Chemistry	1 Credit		
	Foreign Language II	1 Credit		
	Psychology (DC)/Speech (DC)	.5/.SCredits		
	Principles of Health Science	1 Credit		
11	English III	1 Credit	**ENGL 1301 (Fall)/ENGL 1302 (Spring)** BIOL 2401(Fall)/BIOL 2402 (Spring)	**-Meet with Del Mar Advising** -Apply to "Pathway to LVN" program by April 1
	English IV DC	1 Credit		
	Algebra II/ Pre-Ca I	1 Credit		
	Anatomy /Physiology (DQ	1 Credit		
	US History	1 Credit		
	Health Science Theory/ Clinical (Med Term/EKG)	2 Credit		
12	4th Math	1 Credit	RNSG 1128 (Fall) RNSG 1125 (Fall) RNSG 2362 (Spring)	OFFICIAL ENTRY INTO **NURSING PROGRAM**
	4th Science	1 Credit		
	Government/ Economics	.5 / .5 Credits		
	Health Science Practicum (Phlebotomy /PCT, or CMII. /EMT)	2 Credits		
	Nursing Science (DC)	1 Credit		
Key= Yellow-CTE Courses Green -DC Courses	27 Credits Foundation with Endorsement (Public Services)		25 Credit Hours	**LVN Certification will take 3 additional semesters after HS Graduation {See Attached Del Mar Degree Plan)