# 20/20 VISION

# **BUILDING STAFFORD'S FUTURE**

WHERE WILL THE JOURNEY TAKE YOU?



# HIGH SCHOOL 2021-2022 COURSE SELECTION GUIDE

# **Stafford Municipal School District**

# Stafford High School Course Selection Guide 2021-2022

# **Table of Contents**

General Information:	
Course Selection Guide Overview	4
Grade Classification	4
Extracurricular Activity Participation	4
Credit & Non-Credit Courses	5
Grading System	5
Determination of Semester Grade	6
Academic Eligibility Rules	6
Guidelines for Determining Class Rank	6
GPA-Exempt Courses	7
Attendance Requirements	7
Graduation Credit Requirements	8
Foundation High School Program Endorsement Opt-Out	8
Special Education Graduation Requirements	8
Summary of State Required Graduation Plans	9
Credits Required	9
State Testing Requirements for Graduation	11
District Requirements for Early Graduation	11
Concurrent Enrollment Courses/Dual Credit Courses	11
Alternative Methods for Earning Credit	12
Transfer Credit	12
Planning Your Schedule	13
Academic Options	13
Stafford College and Career Center	14
Schedule Change Requests	15
Advanced Placement Program	16
HCC Dual Credit Guidelines: College Now and Associate's Degree	18

# **Course Descriptions:**

English Language Arts	24
Foreign Language	28
Math	31
Science	34
Social Studies	37
Fine Arts	42

Physical Education and Health	47
Military Science/JROTC	48
Agriculture, Food and Natural Resources	49
Arts, AV Technology and Communication	52
Business Management and Administration	56
Education and Training	60
Health Science	62
Hospitality and Tourism	64
Information Technology	67
Law, Public Safety, Corrections and Security	69
Manufacturing	71
Marketing	73
Science Technology Engineering Mathematics (STEM)	75
Transportation, Distribution and Logistics	77

# **Counseling Department**

Counselor	Students Last Name	Office Phone Number	Email Address
Grace Landry	A - Gr	281.261.9272	glandry@staffordmsd.org
Carrie Sims	Gu - Pa	281.208.6129	csims@staffordmsd.org
Andrea White	Pe - Z	281.261.9217	awhite@staffordmsd.org

# Stafford Municipal School District 1633 Staffordshire Road, Stafford, Texas 77477 (Phone) 281.261.9200 – (Fax) 281.261.9249

# "The Best Little School District in Texas"

The mission of Stafford Municipal School District (SMSD), a diverse and visionary learning community, is to prepare each student to become a critical thinker and an ethical, productive citizen, in the pursuit of excellence through an unwavering commitment to provide multiple life and learning experiences led by dedicated professionals using innovative teaching techniques in an engaging learning environment.

# **BOARD OF TRUSTEES**

Christopher Caldwell – President Xavier Herrera – Vice President Alicia Lacy-Castille – Board Secretary Ash Hamirani – Trustee Manuel Hinojosa – Trustee Greg Holsapple – Trustee Jacqueline Jean-Baptiste – Trustee

## SUPERINTENDENT OF SCHOOLS

Dr. Robert Bostic

#### PRINCIPAL

Stafford High School

Raymond Root

## COURSE SELECTION GUIDE OVERVIEW

This guide is designed to help you select courses that you will take in high school towards the completion of your chosen diploma requirements. All programs have been developed with the philosophy that excellence in education is equally important for all students. The programs are designed to allow each student regardless of interest or ability, to pursue a course of study that is appropriate to meet present and future needs.

Your high school education, whether you are preparing for work or college, is influenced by your selection of courses and by the application of your abilities. A major part of your school work consists of fundamentals that you will need all of your life. Gaining admission to college or any post-secondary educational institution including business school, or a technical institute, is competitive. Although colleges vary greatly in their specific entrance requirements, admission is based on the applicant's rank in class, the types of courses taken, test scores, participation in activities and recommendations from your teachers and counselor.

Students who are planning to enter the work force immediately after graduation should realize that today's job market is very competitive. In order to gain employment and remain employed, all students need academic competencies in reading, writing, speaking and listening, mathematics, reasoning and study skills, as well as technical skills, mechanical skills, and interacting appropriately in the work force.

Please use this guide as a source of information and an aid in preparing your high school program. Your counselor will answer any questions that you may have about a particular area or help you gather information that is currently not available in the guide.

#### **Grade Classification**

Students are classified at the beginning of each school year according to the number of credits they have earned. Classification will remain the same throughout the school year except for graduating seniors, who may be reclassified at the end of the first semester. Minimum grade classification requirements are as follows:

Grade Classification	State/Local Credits Earned
Sophomore - 10th	6.0
Junior - 11th	12.0
Senior - 12th	18.0

#### **Extracurricular Activity Participation**

A student may participate in extracurricular activities at the beginning of the school year only if the student has earned the appropriate number or credits for the number of years that they have been in high school. A student must be enrolled for at least four hours per day to be considered in membership for one full day (19 TAC §129.21 [h]). The classes in which the student is enrolled for the four hours may be for either state approved or local credit. Students are eligible to participate in a League contest as representatives of a participant school if they meet the TEA requirements above. They must be full-time day students in a participant high school and be in compliance with written transfer and admission policies of the local school. Classes such as study hall, office aide and off-campus do not meet this

requirement. A student may not drop a class in which he/she has a grade below 70 after the end of the first four school weeks of the class without it being considered a failing grade for eligibility purposes. Each coach or director will explain these requirements to the students.

Students interested in academic eligibility in athletics at an NCAA Division I or II College need to satisfy the requirements of NCAA by-law 14.3 (proposition 48). Interested parents and students need to contact the counselor and coach for more detailed information or visit the NCAA website at http://www.ncaa.org. To register for the NCAA Clearinghouse after completing the eleventh-grade visit www.ncaaclearinghouse.net.

Number of Years	Number State Credits at
Completed in High	Beginning of the School
School	Year
1	5
2	10
3	15

#### State Credit Courses/Course Credit

All courses which are to be counted toward grade level and graduation requirements must be state approved courses. Students must complete the correct graduation plan for their cohort upon entering high school to receive a diploma.

High school students are required to complete courses mandated under their graduation plan. Credit for a course may be earned only if the student receives a grade equivalent to a 70 or higher on a 100-point scale. State-approved courses are aligned to the Texas Essential Knowledge and Skills (TEKS). Credits are awarded in semester increments. A one-semester course is worth a .5 credit. A full-year course is worth 1.0 credit, with some identified courses are worth more than one credit. If a student fails a semester course, the student must retake the entire course to earn graduation credit. If a student fails one semester of a multi-semester course, the student only retakes the semester that was failed. In a two-semester course, a student can gain credit if both semesters average to a 70 or higher for the year. High school courses taken in middle school will be included on a student's transcript and count in the grade point average (GPA).

#### **Non-Credit Courses**

Some courses do not count toward graduation credits, will not post to a student's transcript, and will not be calculated for GPA and class rank. Such classes may include:

- Office Aide
- Study Hall

#### **Grading System**

Student performance is reported using numerical grades. The State Board of Education has set 70 as a minimum passing grade. This state-wide grading system is as follows:

А	90 - 100
В	80 - 89
С	75 - 79
D	70 - 74
F	69 and below (not
	achieving mastery)
Ι	Incomplete

Page **5** of **78** 

Six weeks grading averages are determined by grades recorded in the grade book. Student will earn  $\frac{1}{2}$  (.5) credits for any semester course with a semester grade of 70 or above.

#### **Determination of Semester Grade**

A semester grade consists of (three) six weeks grades and the semester exam. The (three) six week's grades average together for 6/7 of the semester grade and the semester exam counts as 1/7 of the semester grade.

#### Academic Eligibility Rules

A student shall be suspended from participation in all extracurricular activities sponsored or sanctioned by the school district during the three-week period following a grade reporting period in which the student received a grade lower than 70 in any class. This suspension continues for at least three weeks and is not removed during the school year until the student's grade in each class, other than certain identified classes, is 70 or greater. A student may continue to practice or rehearse with other students for an extracurricular activity but may not participate in a competition or other public performance. A suspended student may regain eligibility seven days after the six-week grading period ends or seven days after a three-week evaluation period (progress reporting). For a student to be eligible to participate in UIL activities, the student must be classified as a full-time student (five classes). Classes such as study hall, office aide, and off-campus do not meet this requirement.

Certain designated advanced classes are eligible for a waiver of the UIL "No Pass, No Play" Policy. For a list of these courses, please refer to pages 16 and 18 of this manual.

#### **Guidelines for Determining Class Rank**

Graduating seniors beginning with the class of 2011 and ending with the class of 2023 shall be ranked within the graduating class as follows:

A weighted system shall be used for computing class rank. The actual grades on the report card and permanent record shall not be changed. A 4.0 scale shall be used to calculate grade point average (GPA) for all eligible courses except Honors, AP and dual credit/concurrent enrollment courses as outlined in the high school student handbook. A 5.0 scale shall be used when computing GPA for Honors, AP and dual credit/concurrently enrollment courses. [See policies at EIC Local].

Graduating seniors beginning with the class of 2024 shall be ranked within the graduating class as follows:

A weighted system shall be used for computing class rank. The actual grades on the report card and permanent record shall not be changed. The district shall assign weights to semester grades, including failing grades, earned in eligible courses and calculate a weighted numerical grade average. Eligible AP courses shall be categorized and weighted by a factor of 1.10 as Advanced courses. Eligible Honors and dual credit courses shall be categorized and weighted by a factor of 1.05 as Honors courses. All other eligible courses shall be categorized and weighted by a factor of 1.00 as Regular courses. [See policies at EIC Local].

Grades earned through correspondence courses, credit by examination (with or without prior instruction), summer school, distance learning courses, credit for courses not recognized by TEA, credit for which a pass/fail grade was given, and credit awarded in a non-accredited instructional setting shall not be included when determining class rank. In addition, high school courses taken in grade eight, as

well as any two- or three-credit career and technology work-based training courses; or local credit course, shall not be included in the computation. [See policies at EIC Local].

#### **GPA-Exempt Courses**

SMSD encourages all students to pursue their areas of special talents and interests in order to enrich their academic achievement. To foster continued student participation in these classes, SMSD allows juniors and seniors to participate in the third and fourth years of the following courses on a GPA-exempt basis:

Yearbook	Dance Team
Athletics (Does not include PE)	Advanced Agriculture Courses
Band	JROTC
Cheerleading	Theatre
Choir	

This option is available to junior and seniors who wish to take courses from the above list that are beyond the requirements for graduation. To qualify for the GPA exemption for the third or fourth year course, the student must have an overall B average in the prerequisite courses for the  $3^{rd}/4^{th}$  year course for which he/she is seeking a waiver. He/she must also have already taken the first two years of this particular course at the high school campus. All students must meet the prerequisites of each course and have parent, teacher, and counselor approval.

- Junior students may receive a GPA exemption for only one course their junior year.
- Full year courses will be exempted for 1.0 credits only.
- Senior students who have not used any of the GPA exemptions during their junior year would qualify for two exemptions during their senior year as long as prerequisites are met.
- The option of securing exemptions for two classes in the same year is only available to seniors for whom no GPA exemptions have been used prior to their senior year
- Students may take only two (2) full-year courses or four (4) one semester courses total in their high school career on a GPA Exempt basis.

#### **Attendance Requirements**

To receive credit in a class, a student must attend at least 90 percent of the days the class is offered. A student who attends at least 75 percent but fewer than 90 percent of the days the class is offered may receive credit for the class if he or she completes a plan, approved by the principal, which allows the student to fulfill the instructional requirements for the class. If a student is involved in a criminal or juvenile court proceeding, the approval of the judge presiding over the case will also be required before the student receives credit for the class. [See policies at FEC.]

If a student attends less than 75 percent of the days a class is offered or has not completed a plan approved by the principal, then the student will be referred to the attendance review committee to determine whether there are extenuating circumstances for the absences and how the student can regain credit, if appropriate.

In determining whether there were extenuating circumstances for the absences, the attendance committee will use the following guidelines:

• All absences will be considered in determining whether a student has attended the required percentage of days.

• A transfer or migrant student begins to accumulate absences only after he or she has enrolled in the district.

• In reaching a decision about a student's absences, the committee will attempt to ensure that it is in the best interest of the student.

However, as with any other student, to receive credit a student who enrolls after instruction for the year or semester has begun is required to demonstrate academic achievement and proficiency of the subject matter as required under §28.021 and 19 T.A.C. §74.26.

#### **Graduation Credit Requirements**

House Bill 5 provides a new, more flexible graduation program that allows students to pursue their interests. The program contains four parts:

- A 22 credit Foundation Program which is the core of the new Texas High School Diploma
- Five endorsement options that allows students to focus on a related series of courses
- A higher performance category called Distinguished Level of Achievement
- Performance acknowledgments that note outstanding achievement

All courses which are to be counted toward graduation must be state approved courses. Students are required to enroll in courses necessary to complete the Foundation plus Endorsement Plan, the Distinguished Level of Achievement and/or a Performance Acknowledgement Plan or the Stafford Scholar Recognition Program to receive a SMSD diploma. Each of the plans offers students the opportunity to challenge themselves as they progress through high school. Under some circumstances the above requirement may be waived and students may graduate under the Foundation High School Plan without an Endorsement, (22 credits).

#### Foundation High School Program Endorsement Opt-Out

The Texas Education Code, Section 28.025(b), allows a student to graduate under the Foundation High School Program without earning an endorsement if, after the student's sophomore year, the student and the student's parent/guardian are notified of the benefits of graduating with an endorsement and the student's parent/guardian gives written permission for the student to opt out of an endorsement. The benefits of graduating with an endorsement are available in the Graduation Toolkit, produced in partnership by the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Workforce Commission.

#### **Special Education Graduation Requirements**

A Special Education student is eligible to graduate when the student satisfactorily completes the minimum academic credit requirements for graduation applicable to regular education students, including satisfactory performance on the State of Texas Assessment of Academic Readiness (STAAR) test.

A Special Education student who does not meet the above requirements may graduate upon determination by the ARD Committee that the student has completed requirements specified in the IEP that have resulted in one of the following:

Full-time employment based on the student's abilities and local employment opportunities, in addition, sufficient self-help skills to enable the student to maintain the employment without direct and ongoing educational support of the local school district; or,

Demonstrate mastery of specific employability skills and self-help skills that do not require direct ongoing educational support of the local school district; Access to services that are not within the legal responsibility of public education.

\*NOTE: All Special Education students' schedules are the result of an Admission, Review and Dismissal (ARD) Committee decision.

#### **Summary of State Required Graduation Plans**

Every student in a Texas public school who entered grade 9 in the 2014–15 school year and thereafter will graduate under the "foundation graduation program." Within the foundation graduation program are "endorsements," which are paths of interest that include Science, Technology, Engineering, and Mathematics (STEM); Business and Industry; Public Services; Arts and Humanities; and Multidisciplinary Studies. Endorsements earned by a student will be noted on the student's transcript. The foundation graduation program also involves the term "distinguished level of achievement," which reflects the completion of at least one endorsement and Algebra II as one of the required advanced mathematics credits. Earning the "distinguished level of achievement" designation allow one to compete for top ten percent automatic admissions eligibility at a Texas public university.

State law and rules prohibit a student from graduating solely under the foundation graduation program without an endorsement unless, after the student's sophomore year, the student and student's parent are advised of the specific benefits of graduating with an endorsement and submit written permission to the school counselor for the student to graduate without an endorsement. A student who anticipates graduating under the foundation graduation program without an endorsement and who wishes to attend a four-year university or college after graduation must carefully consider whether this will satisfy the admission requirements of the student's desired college or university.

Graduating under the foundation graduation program will also provide opportunities to earn "performance acknowledgments" that will be acknowledged on a student's transcript. Performance acknowledgments are available for outstanding performance in bilingualism and biliteracy, in a dual credit course, on an AP or IB examination, on certain national college preparatory and readiness or college entrance examinations, or for earning a state recognized or nationally or internationally recognized license or certificate. The criteria for earning these performance acknowledgments are prescribed by state rules, and the school counselor can provide more information about these acknowledgments.

#### **Credits Required**

The foundation graduation program requires completion of the following credits:

Course Area	Number of Credits: Foundation Graduation Program	Number of Credits: Foundation Graduation Program with an Endorsement
English/Language Arts	4	4
Mathematics	3	4
Science	3	4
Social Studies	3	3
Physical Education	1	1
Language other than English	2	2
Fine Arts	1	1

Professional	.5	.5
Communications/Speech		
(SMSD)		
Electives	4.5	6.5
Total	22 Credits	26 Credits

\*\*\*This chart is a guide and is not a substitute for working with your counselor. Further information about graduation credit requirements can be found at http://TEA.Texas.gov/graduation.aspx

Endorsements	A student may earn an endorsement by successfully completing
	curriculum requirements for the endorsement
	a total of four credits in mathematics
	a total of four credits in science
	two additional elective credits
STEM	A coherent sequence or series of courses selected from one of the following:
	CTE courses with a final course from the STEM career cluster
	Computer science
	Mathematics
	Science
	<ul> <li>A combination of no more than two of the categories listed above</li> </ul>
Business and	A coherent sequence or series of courses selected from one of the following:
Industry	<ul> <li>CTE courses with a final course from the Agriculture, Food, &amp; Natural Resources;</li> </ul>
maastry	Architecture & Construction; Arts, Audio/Video, Technology & Communications; Business
	Management & Administration; Finance; Hospitality & Tourism; Information Technology;
	Manufacturing, Marketing; Transportation, or Distribution & Logistics CTE career cluster
	<ul> <li>The following English electives: public speaking, debate, advanced broadcast journalism</li> </ul>
	including newspaper and yearbook
	<ul> <li>Technology applications</li> </ul>
	<ul> <li>A combination of credits from the categories listed above</li> </ul>
Public Services	A coherent sequence or series of courses selected from one of the following:
Fublic Services	<ul> <li>CTE courses with a final course from the Education &amp; Training; Government &amp; Public</li> </ul>
	Administration; Health Science, Human Services; or Law, Public Safety, Corrections, and
	Security career cluster
	• JROTC
Arts and	A coherent sequence or series of courses selected from one of the following:
Humanities	<ul> <li>Social studies</li> </ul>
numanities	<ul> <li>The same language in Languages Other Than English</li> </ul>
	<ul> <li>Two levels in each of two languages in Languages Other Than English</li> </ul>
	<ul> <li>American Sign Language (ASL)</li> </ul>
	<ul> <li>Courses from one or two categories (art, dance, music, and theater) in fine arts</li> </ul>
Multidicciplinary	English electives that are not part of Business and Industry
Multidisciplinary	A coherent sequence or series of courses selected from one of the following:
Studies	• Four 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
	• Four credits in each of the four foundation subject areas to include English IV and
	chemistry and/or physics
	• Four credits in AP, IB, or dual credit selected from English, mathematics, science, social
	studies, economics, languages other than English, or fine arts

#### **State Testing Requirements for Graduation**

Students first enrolled in ninth grade or below beginning with the 2011-2012 school year must take the STAAR- EOC (State of Texas Assessment of Academic Readiness – End of Course) assessments for courses in which they are enrolled as part of their graduation requirements. The STAAR–EOC Assessments consist of end-of-course assessments that will align to the courses that students must take in order to graduate from high school. Collectively these tests are designed to place greater emphasis on college and career readiness.

The STAAR – EOC's Assessments include: English Language Arts – English 1, English 2 Math - Algebra 1 Science - Biology Social Studies - U.S. History

Each student will be required to achieve certain scores on the applicable EOC assessments to graduate, depending on the graduation program in which the student is enrolled. A student who has not achieved sufficient scores on the EOC assessments to graduate will have opportunities to retake the assessments in May, December, and June. If a student fails to perform satisfactorily on an EOC assessment, the district will provide remediation to the student in the content area for which the performance standard was not met.

Only students who are classified in grade 11 or 12 during the 2014-15, 2015-16, or 2016-17 school years who have taken and have failed to achieve the end-of-course (EOC) assessment performance requirements for graduation for not more than two courses are eligible for Individual Graduation Committee (IGC) review [TEC, §28.0258(a) and (I); 19 Tex. Admin. Code § 101.3022]. Due to the expiration of SB149 for students classified as juniors or seniors after 2016-2017 school year, any student who does not successfully meet a passing score on any STAAR assessment may not participate in Stafford High School graduation exercises.

#### **District Requirements for Early Graduation**

Students wishing to graduate early should first have a conference with their counselor to complete a transcript credit evaluation. The student's parents must write a letter addressed to the principal requesting permission for the student to graduate early including the expected date of graduation. To be eligible to graduate early, a student shall complete all coursework and end of course testing required of the ninth-grade class in which he or she begins high school. Required coursework must be taken in advance of the year of anticipated graduation by means of summer school, approved online coursework, or community college. It is the student's responsibility to absorb any costs associated with coursework that would accelerate their graduation date. Effective for students entering grade nine in the 2007–08 school year and thereafter, a student who completes the high school requirements in fewer than four years shall be ranked in the class with which he or she actually graduates and shall be eligible for honors positions. Calculation of ranking for December graduates shall be in the month of December when all graduation requirements have been met.

#### **Concurrent Enrollment Courses/Dual Credit Courses**

The District may enter into an agreement with a public junior college that allows the junior college to offer a course in which a student attending a district high school may enroll and for which the student may receive both concurrent course credit toward high school graduation requirements and course credit as a junior college student. Such a student will receive junior college credit if the student has received prior approval from his Stafford High School (SHS) counselor or principal to enroll in the concurrent credit course and has been admitted to the junior college. (Concurrent credit is defined as credit received from a junior college or community college.)

A Houston Community College (HCC) program is available to all students enrolled in specified advanced courses. Students must meet HCC enrollment requirements. Students who take the concurrent credit courses will earn regular college credit and high school credit for the course. A student must be a full-time student to enroll in a concurrent credit program. Students enrolling in the concurrent credit program must take the Texas Success Initiative Assessment Test (TSI) and pass sections related to the course selected for concurrent credit enrollment to satisfy The Texas Success Initiative Assessment (TSI) standards. Specific information can be obtained from HCC or the SHS counselor's office. The District may enter into an agreement with a public college to form a dual credit partnership. Dual Credit means the process by which a high school student enrolls in a college or university course and receives simultaneous dual academic credit for the course from both the college and the high school [GNC (legal)]. The student must have prior approval from his SHS Counselor or principal to enroll in the dual credit course. (Dual credit is defined as credit received from a four-year college or university).

Prior to enrollment in a Texas public college or university, most students must take a standardized test, such as The Texas Success Initiative Assessment (TSI). The purpose of the TSI is to assess the reading, mathematics, and writing skills that entering freshmen-level students should have if they are to perform effectively in undergraduate certificate or degree programs in Texas public colleges and universities. This test may be required before a student enrolls in a dual-credit course offered through the district as well.

#### Alternative Methods for Earning Credit

Credit toward state graduation requirements may be granted for distance learning and correspondence courses only as follows:

- The institution offering the correspondence course is The University of Texas at Austin, Texas Tech University, or another public institution of higher education approved by the commissioner of education.
- Students may earn course credit through distance learning technologies such as satellite, internet, two-way videoconferencing, online courses, the Texas Virtual School Network (TxVSN), and instructional television.
- The distance learning and correspondence courses must include the state-required essential knowledge and skills for such a course.

The TxVSN is a state-led initiative for online learning authorized by Education Code Chapter 30A. The TxVSN is a partnership network administered by TEA in coordination with regional education service centers (ESCs), Texas public school districts and charter schools, institutions of higher education, and other eligible entities.

The TxVSN is comprised of two components-the online school (OLS) program and the statewide course catalog. See policy EHDE (LEGAL)

#### **Transfer Credit**

The District shall accept all credits earned toward state graduation requirements by students in accredited Texas school districts, including credits earned in accredited summer school programs. "Accredited" shall be defined as accreditation by TEA, an equivalent agency from another state, or an accrediting association recognized by the Commissioner. Credits earned in local credit courses may be transferred at the District's discretion. Transfer students shall not be prohibited from attending school pending receipt of transcripts or academic records from the district the student previously attended. 19 TAC 74.26(a) (1).

Records and transcripts of students from Texas nonpublic schools or from out of state or out of the country (including foreign exchange students) shall be evaluated, and students shall be placed promptly in appropriate classes. The District may use a wide variety of methods to verify the content of courses for which a transfer student has earned credit. 19 TAC 74.26(a) (2)

A student enrolling from a non-accredited public, private, or parochial school, including a home school, shall be placed initially at the discretion of the principal, pending observation by classroom teachers, guidance personnel, and the principal. Criteria for placement may include:

- Scores on achievement tests, which may be administered by appropriate District personnel.
- Recommendation of the sending school.
- Prior academic record.
- Chronological age and social and emotional development of the student.
- Other criteria deemed appropriate by the principal.

Grades earned through correspondence courses, credit by examination (with or without prior instruction), summer school credit, distance learning courses, credit for courses not recognized by TEA, credit for which a pass/fail grade was given, and credit awarded in a non-accredited instructional setting shall not be included when determining class rank. In addition, high school courses taken in grade eight, as well as any two- or three-credit career and technology work-based training courses; or local credit course, shall not be included in the computation [EIC (local)].

#### **Planning Your Schedule**

High school course selection is among the most important academic decision a student will make. Careful planning of the four years of high school and at least the first two years of college is very important. All students must have a 4-year graduation plan on file with their counselor. This form is a worksheet for students, parents, and counselors to use to determine which courses the student needs for the next four years. This graduation plan is not binding and may be changed at any time, but it does help a student and his/her parents to plan the years in high school and beyond. As each high school year concludes, every student is one step closer to the future and the goals they have set for themselves. Stafford High School staff is available to assist in the planning process and successful completion of student/parent goals.

#### **Academic Options**

Students in SMSD are provided with a comprehensive set of course offerings that cover the essential knowledge and skills mandated by the Texas Education Agency. Students have several academic options when selecting classes. Students are advised to take courses at a level where they will be challenged and yet perform successfully.

- Advanced Academic: (starting with the freshman class of 2010-2011 and thereafter) with this level, classes will come with increased expectations for student performance, instructional delivery and rigorous academic content. All courses will be taught with a focus on readiness for the upcoming end of course assessments.
- Honors (formerly Pre-AP): Honors courses are more complex and abstract. Each course emphasizes the academic study and performance skills to help prepare the student for the Advanced Placement classes in that subject area.
- Advanced Placement (AP): AP classes cover the breadth of information, skills and assignments found in corresponding college courses and meets peer-review standards set by top educators in conjunction with the College Board. An AP class prepares students to take College Board Advanced Placement tests that may make them eligible to receive college credit while still

attending High School. All students enrolled in Advanced Placement classes are expected to take the AP exams.

- Special Education Placement: Special Education services are provided to students who are found to be eligible for such services by the Admission, Review, and Dismissal (ARD) Committee. Eligibility is based on identified physical, mental and/or emotional difficulties that cause significant educational issues. Specialized instruction and related services to meet individual student needs are provided through both regular and special education courses. Specialized instruction is provided along the following continuum and reviewed for placement in the least restrictive environment annually:
  - Classes with accommodations
  - Classes with inclusion support
  - Classes with modified course objectives
  - o Classes with different course objectives

Specific special education course titles are available through the special education department.

#### Stafford College and Career Center

To compete successfully in a high-tech, global economy, Texas must have a skilled and educated workforce that provides a foundation for continued economic productivity. Lifelong learning is the key to career and life success. The chart below illustrates the job opportunities and level of education necessary for our students to be competitive in the future job market. Starting with the freshmen class of 2012-2013 each student will be required to complete 1 credit from the CTE Academy Clusters which will fulfill 1 state required elective towards graduation.

- Agriculture, Food and Natural Resources:
  - The production, processing, marketing, distribution financing and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.
- Business Management & Administration:
  - Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.
- Education & Training:
  - Planning, managing and providing education and training services and related learning support services.
- Health Science:
  - Planning, managing and providing therapeutic services, diagnostic services, health information, support services and biotechnology research and development.
- Hospitality and Tourism:
  - Planning, managing and providing services that include lodging, travel and tourism, recreation, amusements, attractions, and restaurant and food/beverage. This industry maintains the largest national employment base in the private sector.
- Information Technology:

- Building linkages in IT occupations framework for entry level, technical, and professional careers related to design, development, support and management of hardware, software, multimedia, and systems integration services.
- Law, Public Safety, Corrections and Security:
  - Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.
- Marketing, Sales & Services:
  - Planning, managing and performing marketing activities to reach organizational objectives
- Manufacturing:
  - 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.
- Leadership:
  - The JROTC Program provides leadership training and development that is essential for career success. Individual characteristics are identified through the Personal Skills Map and Winning Colors assessments. Leadership values, principles, strategies and skills are taught and reinforced through case studies, team-building and other actual leadership activities.
- SEAL (Spartan Engineering Academy Lab):
  - Exploring technology systems, manufacturing processes and product design; develop, create and analyze product models and learn how math, science and technology help people.
- Transportation, Distribution and Logistics:
  - Planning, management and movement of people, materials and goods by road, pipeline, air rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

#### Schedule Change Request

Every spring students register for classes that they will need the following school year. Because class size and staffing decisions are determined by their choices, it is important for students to plan carefully. After school begins, course schedule changes will be made only if:

- The student is a senior that is not scheduled in a course needed for graduation.
- The student already earned credit for a course currently in their schedule.
- The student does not meet prerequisites for the course they are enrolled in.
- The student has previously failed the course with the same teacher.
- The student has been dismissed from a program where approval must be granted.
- The student does not have a full schedule (eight periods).

IF GRANTED, THE SCHEDULE CHANGE IS BINDING FOR THE SEMESTER AND WILL BE GRANTED ONLY IF THERE IS SPACE AVAILABLE. OTHER CLASS PERIODS, TEACHERS AND LUNCH PERIOD MAY ALSO CHANGE IN ORDER TO FULFILL THE SCHEDULE CHANGE REQUEST.

#### **Advanced Placement Program**

The Advanced Placement (AP) Program is a cooperative educational endeavor between secondary schools, colleges and universities. It exposes high school students to college-level material and gives them the opportunity to show that they have mastered course curriculum by taking an AP Exam. Colleges and universities can then grant credit, placement, or both to students who have done so. AP exams are a significant part of the AP Program, but they are not the only part. AP courses lay the groundwork for students to succeed on the exams and later in a college or university.

There are many benefits for students who take AP courses.

They can study subjects of interest and challenge themselves with students who are similarly motivated. AP often helps steer students who are unsure about future plans toward college or advanced studies, and most colleges view any AP experience as a plus. This gives students a head start and increases their future options.

AP prepares students for the future by giving them those tools that will serve them well throughout their college careers.

AP Examinations are developed each year by committees of five to eight college and AP high school faculty appointed by the College Board and aided by consultants. The exams are based on the courses outlined in the College Board's Advanced Placement Course Descriptions.

\*The availability of the courses for the following exams will be reviewed on a yearly basis depending on student interest and faculty availability.

Advanced Placement Courses:

AP Biology	AP Psychology
AP Chemistry	AP Calculus AB
AP Physics	AP Statistics
AP Human Geography	AP English 3
AP World History	AP English 4
AP US History	AP Spanish 4
AP Government	AP Spanish 5
AP Economics	
Honors Courses:	
Honors Biology	Honors Algebra 2
Honors Chemistry	Honors Pre-Calculus
Honors Physics	Honors English 1
Honors World Geography	Honors English 2
Honors World History	Honors Spanish 2
Honors Geometry	Honors Spanish 3

In order to ensure students' success in AP or Honors courses, certain criteria must be met prior to enrollment. Approval will be granted if a student qualifies according to the criteria below:

- Recommendation from current teacher, and a grade of 85 or above average for the year in the current academic area (if a student wants to take AP U.S. History, he/she should have at least an 85 in World History. If he/she passed a prerequisite course with less than an 85 average, that student may take the AP class with parent and teacher approval only).
- Passed the State Required Testing for the specific area of interest on the first attempt.

Due to the more rigorous requirements of AP/ Honors classes at the high school level, it is recommended that students take no more than three (3) AP and/or Honors classes at a time. An adequate number of students must register for the course for an AP class to be offered. Enrolling in an AP class means the student intends to sit for the AP exam.

To Drop an Honors or AP Class:

The high school master schedule has been designed to offer classes that best meet the interests and needs of the students based on enrollment in those classes. Therefore, a student will be allowed to drop an Honors or AP course only if one of the following conditions exists:

- Students are expected to seek support when needed in order to be successful in an Honors/AP course such as tutorials and conferencing with the teacher.
- The student may request to change from an Honors/AP to the Advanced Academic level only after the first six weeks grades are posted and their grade is below a 75.
- The student requests the change at the end of the semester and the student's average is below 75.
- A parent/teacher conference must be held prior to a change using a Drop Class Request form.
- All requests must be made using the Drop Class Request form.

The student's numerical average at the time of the schedule change is the grade that will be recorded in the new class. Weighted points are not given unless a full semester credit has been earned. Withdrawal from an AP class could affect a student's class rank since AP classes are weighted greater than an academic class.

Special Education/ 504 Accommodations on Honors and Advanced Placement Courses

The following guidelines are intended to apply to eligible special education and Section 504 students who enroll in Honors or AP courses. While Honors/AP courses are open to any student wishing to enroll, ARD or Section 504 Committees should be aware that these are high level academic classes and accommodations will not be implemented if they alter the content or standards of the course. The following guidelines shall be applicable to all special education and section 504 students who enroll in Pre/AP courses:

- Accommodations for special education and 504 students may not alter the content or academic standards of the Honors/AP course. Thus, certain allowable accommodations may include, but are not necessarily limited to the following:
- Extended time for testing
- Opportunity to repeat and explain instructions
- Assignment notebook
- Minimal auditory distractions
- Encouragement for classroom participation

Page **17** of **78** 

- Large print, Braille/ peer to read aloud
- Behavior intervention plan
- Assistive technology as defined by the committee
- Altered format of exams, such as highlighted instructions or alternative spacing of questions
- Altered assignments as needed for persons with motor or visual impairment

The following are examples of accommodations which would alter the content or standards of the course and are not allowable.

- Reduced assignments
- Special projects in lieu of assignments
- Exams of reduced length
- Open book exams
- Peer tutoring/ paired work arrangement
- Any reduction of content or standards of the course
- Reduced mastery

If the ARD committee or Section 504 Committee does not believe that a student will be successful in an Honors/AP course, it should notify the parents or the student as appropriate. While the decision to enroll in a Pre/AP class is ultimately made by the parent or student, the ARD or 504 Committee may meet and recommend removal of the students from the student if the student is not meeting the standards applicable to students in that program and, as a result, is failing or at risk of failure.

**HCC Dual Credit Guidelines: College Now Program – Associate's Degree in Multidisciplinary Studies** The Associate in Arts Degree is intended primarily for students planning on transferring to a senior college or university to receive a baccalaureate degree in the following areas: Communication, Business, Social Sciences, Humanities, and Fine Arts.

Commencing the fall of 1999, all Associate in Arts academic core curriculum courses taken at HCC are guaranteed to transfer and count toward the core curriculum at all Texas public higher educational institutions.

#### SAMPLE DEGREE PLAN FOR CORE CURRICULUM

COMPONENT PARTS	REQUIRED	COURSE(S)	LOCATION	YEAR TAKEN
FOR DEGREE	HOURS			
Communications	6 hours	ENG 1301/ENG 1302	SHS	Junior
Mathematics	3 hours	Math 1314/*Math 1315	SHS	Senior
Life & Physical Sciences	6 hours	BIO 1306/1106/BIO 1407	SHS	Junior/Senior
Language, Philosophy &	3 hours	BRIT LIT 2322/	SHS	Senior
Culture		*BRIT LIT 2323		
Creative Arts	3 hours	ARTS 1303/*ARTS 1304	SHS	Junior
American History	6 hours	HIST 1301/HIST 1302	SHS	Junior
Government/Political Science	6 hours	GOVT 2305	SHS	Senior
		GOVT 2306	HCC	Summer before
				Senior Year
Social & Behavioral Science	3 hours	ECON 2301	SHS	Senior Year
Component Area Option	9 hours	SPAN 1411/SPAN 1412	SHS	Freshman
		(Testing Required)		
		EDUC 1300	SHS	Freshman
		SPH 1311	HCC	
*Electives	18 hours	***See sample list below - H	CC has final appr	oval
	60 hours	for elective courses for the Degree Plan		

\*Elective courses may be required to be taken online during the school year or during the summer prior to graduation

\*Academic Elective applied towards 18-hour elective requirement

- \*\*\*Culinary Arts (18 hours credit) starts with sophomore year, must meet prerequisite
- \*\*\*Welding (18 hours credit) starts with sophomore year, must meet prerequisite
- \*\*\*Film/Video (24 hours credit) starts with sophomore year, must meet prerequisite
- \*\*\* Business (18 hours credit) starts with sophomore year, must meet prerequisite

#### Prior to Enrolling in a Dual Credit Class:

- 1. Create your ApplyTexas account or log in using an existing account at www.applytexas.org (Instructions for completion below)
- 2. Complete an on-line admission application to Houston Community College System using your ApplyTexas account (Instructions for completion below.
- 3. Meet the State of Texas Success Initiative Assessment requirements.

The Texas Success Initiative Assessment (TSI) is a state-mandated test designed to ensure that students have the academic skills necessary to perform effectively at the college level. If a student takes the TSI Assessment, he or she must complete the entire TSI Assessment and earn a passing score on the appropriate sections.

To qualify for a WAIVER/EXEMPTION from the TSI Assessment, a student must meet or exceed the scores on one of the following tests: ACT, SAT, STAAR EOC. A student must meet or exceed all portions of the test and the composite score to request a TSI Waiver/ Exemption. See your Counselor for test score requirements.

#### ApplyTexas Application

#### What You Will Need Before Getting Started

#### Email address:

• You will need a valid email address to receive responses and updates about your application.

#### Social Security Number:

- Although it is not required to apply for admission, it is recommended.
- A social security number is required for Financial Aid and some Military and Veteran benefits.
- Providing a social security number helps us in processing applications faster.

#### Full Legal Name:

- To avoid delays in processing your application and other documents, please use your full legal name.
- Do not use nicknames or abbreviations because this information will be used for your official record if you enroll.
- Use your full, legal name on all documents sent to the institution.

#### Step 1:

• Create your ApplyTexas account or log in using an existing account at www.applytexas.org

#### Step 2:

- Build your "Profile" (needed to start your application)
- Save Profile and verify your email; enter the required information

#### Step 3:

Under My Applications tab, click on "Start a New Blank Application"

- Select "Create a new 2-year college admissions application"
- Select target college under "Search for a college from an alphabetical list "Scroll down the list until you find Houston Community College
- Select "Houston Community College (Houston)" and click continue If you are applying to take Dual Credit or Concurrent High School Enrollment, select Yes.

#### Step 4:

• Select semester in which you plan to first enroll

#### Step 5:

• The major you choose is defined as an Area of Study at HCC. An Area of Study is intended to help students choose a career path by broadly grouping similar programs and majors. Within each Area of Study HCC has many specific programs and majors. For a full list of Degrees and Certificates, please visit http://www.hccs.edu/programs/

#### Step 6:

- Enter your Social Security Number. Your social security number is not required for the application, but is recommended, and is REQUIRED if applying for Financial Aid.
- Many fields will already be completed based on the information you entered when you built your profile.
- Academic advisors at HCC are committed to your success. Whether your goal is to transfer to a university or obtain the skills to enter the workforce, academic advisors are trained and ready to help you build a plan for your future. For more information visit http://www.hccs.edu/supportservices/advising/.

#### Step 7:

• Confirm Information: Be sure to check the boxes and click save page

#### Step 8:

#### **Educational Background Section:**

- Use the "Find Your High School" button to select your high school
- Don't forget your graduation date. Expected graduation date is required

#### Step 9:

#### What kind of student am I?

Dual Credit: You are seeking to earn college credit for certain high school courses while completing high school requirements. High School Early Admission: You are seeking to earn college credit while still in high school.

#### Step 10:

Residency: The information you provide in this section determines how your tuition is calculated. Read each question carefully. If you have questions about your residency status after being admitted, please contact your counselor.

#### Step 11:

Certification of Information:

• Your application will not be submitted if you do not check the box next to EACH statement

#### Step 12: Submit Application

#### **Dual Credit Student Responsibilities**

<u>Communicating with the professor</u>: It is the responsibility of the college student to communicate directly with their college professor about all matters related to the class. It is not the responsibility of the parents, high school counselors or administrators to communicate with the professor. If an impasse is reached, the professor should contact his or her HCC-Southwest Department Chair and the Dual Credit Faculty Liaison. The student should contact the high school counselor or other appointed Dual Credit Liaison for the high school.

<u>Textbooks</u>: Students are responsible for purchasing the appropriate textbook(s) for their classes. Bookstores are located at the Stafford, West Loop, and Alief Centers. Books are arranged on the shelves by course. If uncertain as to which book(s) to purchase, wait until the first day of classes. The professor will tell you exactly what is needed for the course.

<u>Withdrawing from Class(es)</u>: If a student chooses to discontinue class as a Dual Credit student, he or she is responsible for contacting their High School Counselor and submitting the proper form to the Admission Office at HCC - Stafford. Since a student's timely high school graduation may be in question as a result of withdrawing, the student should also bring documentation that his or her high school counselor has knowledge of the student's intent. **Important: Failure to submit the withdrawal form may result in the student receiving an F for the course.** 

<u>College Grades</u>: HCCS reports only final grades, which are recorded on the Official HCCS Transcript. Grades are posted approximately one week after the semester ends and may be accessed online at <u>www.hccs.edu</u> or by phone at 1-877-341-4300 (available 24 hours). Students enrolled in a Dual Credit class meeting on the college calendar and taught by an HCC-Southwest professor as an off-campus class, will not receive official progress reports, only final grades. Students who take a Dual Credit class meeting on the high school calendar and taught by an HCC-Southwest professor, will not receive official progress reports, only final grades.

<u>Transcripts</u>: Students may request copies of their Official HCCS Transcript by completing the appropriate form, available at the Admissions Office at the Stafford. Requests may also be made to have copies of Official Transcripts sent to other colleges and universities. Students may also request unofficial copies of their transcript for their personal use.

# **COURSE DESCRIPTIONS:**

Stafford High School makes a concerted effort to offer courses and programs to all students; however, some courses may not be available due to staffing and class size. All prerequisites must be met prior to registering for the class unless they are waived in writing by the building principal.

# ENGLISH 4 CREDITS REQUIRED FOR GRADUATION

Semesters: 2

Credits: 1

Grade: 9

English 1: 1901 Prerequisite: None

Students enrolled in English 1 increase and refine their communication skills. They will plan, draft, and complete written compositions on a regular basis. They will edit papers for clarity, appropriate language, and the correct use of the conventions (grammar) and literary terms correctly and interpret the possible influences of the historical context on a literary work. The research process will be used as a tool for learning, vocabulary development will be continued, and the significance of visual representations will be analyzed and critiqued.

Honors English 1: 1902Semesters: 2Credits: 1Grade: 9Prerequisite:Students must have demonstrated reading level at or above grade level; they must meet Honors criteria<br/>and sign a contract of commitment. In addition, student must complete the summer reading selections<br/>prior to the start of school. Students should be prepared to complete an assignment based on the<br/>summer reading selections shortly after school begins.Grade: 9

Students will develop higher-level critical thinking skills that provide more in-depth study of various aspects of the English 1 curriculum. They will also read more literature selections and will practice a greater variety of composition types than regular English.

\*\*\*Every summer, SMSD requires all students to complete a summer reading list before reporting to their next grade level. Students will receive the reading list from their current English teacher before the last day of the 2018-2019 school year. Upon completion of the required list, students will turn in a mandatory reading project to their 2019-2020 English teacher. Please contact your child's current English teacher or check the campus website during the summer for more information.\*\*\*

The novels should be purchased and read by the time school begins. The student will need a copy of the books during the first semester. A project will be assigned and due over the content of the novels within the first 6 weeks of school.

English 2: 2901	L	Semesters: 2	Credits: 1	Grade: 10
Prerequisite:	English 1			

Students enrolled in English 2 will continue to increase and refine their communication skills. They will plan, draft, and complete written compositions that have been edited for clarity, engaging language, and the correct use of the conventions (grammar) and mechanics of written English. An emphasis is placed on persuasive forms of writing, such as logical arguments, expressions of opinion and personal forms of writing. In literature, students will read extensively in world literature, use literary forms and terms, interpret use of literary forms and terms, and interpret the influences of the historical context on a literary work. The research process will be used as a tool for learning, vocabulary development will be continued, and the significance of visual representations will be analyzed and critiqued.

Honors English 2: 2902Semesters: 2Credits: 1Grade: 10Prerequisite:English 1 and must meet Honors criteria and sign a contract of commitment.<br/>Students must complete the summer reading selections prior to the start of school.<br/>Students should be prepared to complete an assignment based on the summer reading selections<br/>shortly after school begins.Grade: 10

Students will develop higher-level critical thinking skills that provide more in-depth study of various aspects of the English 2 curriculum. They will also read more literature selections and will write creatively. Writing skills will be further developed, including development of skills that prepare students for the Advanced Placement style of writing.

\*\*\*Every summer, SMSD requires all students to complete a summer reading list before reporting to their next grade level. Students will receive the reading list from their current English teacher before the last day school. Upon completion of the required list, students will turn in a mandatory reading project to their 2019-2020 English teacher. Please contact your child's current English teacher or check the campus website during the summer for more information.\*\*\*

The novels should be purchased and read by the time school begins. The student will need a copy of the books during the first semester. A project will be assigned and due over the content of the novels within the first 6 weeks of school.

English 3: 900	5	Semesters: 2	Credits: 1	Grade: 11
Prerequisite:	English 1 and 2			

Students enrolled in English 3 will continue to increase and refine their communication skills. They will plan, draft, and complete written compositions on a regular basis that have been edited for clarity, engaging language, and the correct use of the conventions (grammar) and mechanics of written English. Emphasis is placed on business forms of writing, such as the report, the business memo, the narrative of a procedure, etc. In literature, students read in multiple genres primarily from American literature, use literary forms and terms, and interpret the influences of the historical context on a literary work. The research process will be examined, vocabulary development will be continued, and the significance of visual representations will be analyzed and critiqued.

 AP English 3: 9006
 Semesters: 2
 Credits: 1
 Grade: 11

 Prerequisite:
 English 1 and 2
 Must meet AP criteria and sign a contract of commitment.
 Students must take the AP exam in the spring.

 Students must be successful on the English EOC.
 Students must complete the summer reading selections prior to the start of school. Students should be prepared to complete an assignment based on the summer reading selections shortly after school begins.

Students will develop higher-level critical thinking skills that provide more in-depth study of various aspects of the English 3 curriculum, including evaluating literature, analyzing literary criticism, and writing literary analyses. Writing

skills for the English Language and Composition Advanced Placement exam will be further developed. (Through examination, it is possible for students to receive college credit for English courses.)

\*\*\*Every summer, SMSD requires all students to complete a summer reading list before reporting to their next grade level. Students will receive the reading list from their current English teacher before the last day of the 2018-2019 school year. Upon completion of the required list, students will turn in a mandatory reading project to their 2019-2020 English teacher. Please contact your child's current English teacher or check the campus website during the summer for more information. The novels should be purchased and read by the time school begins. The student will need a copy of the books during the first semester. A project will be assigned and due over the content of the novels within the first 6 weeks of school.\*\*\*

English 4: 9007	7	Semesters: 2	Credits: 1	Grade: 12
Prerequisite:	English 1, 2, and 3			

Students in English 4 will continue the development of their communication skills. They will write in a variety of forms, including business, personal, literary, and persuasive. In literature, students read in multiple genres from British and World Literature, use literary forms and terms, and interpret the influences of the historical context on a literary work. The research process will be used as a tool for learning, vocabulary development will be continued, and the significance of visual representations will be analyzed and critiqued.

AP English 4: 9	9008	Semesters: 2	Credits: 1	Grade: 12
Prerequisite:	English 1, 2 and 3			
	Must meet AP criteria and sign a contr	act of commitment		
	Students must take the AP exam in the	e spring.		
	Students needs to have already achiev	ed success on the Er	nglish EOC.	
	Students must complete the summer r prepared to complete an assignment b begins.	•		

Students will develop higher-level critical thinking skills that provide more in-depth study of various aspects of the English 4 curriculum. Writing skills for the English Literature and Composition Advanced Placement exam will be developed. (Through examination, it is possible for students to receive college credit for English courses.)

\*\*\*Every summer, SMSD requires all students to complete a summer reading list before reporting to their next grade level. Students will receive the reading list from their current English teacher before the last day of school. Upon completion of the required list, students will turn in a mandatory reading project to their 2019-2020 English teacher. Please contact your child's current English teacher or check the campus website during the summer for more information. The novels should be purchased and read by the time school begins. The student will need a copy of the books during the first semester. A project will be assigned and due over the content of the novels within the first 6 weeks of school.\*\*\* ENGL 1301 – Composition 1 - English 4: 9017 Semesters: 1 Credits: .5 College Credits: 3 Grade: 11-12 Prerequisite: English 1, 2 HCC application and TSI Assessment score

A course devoted to improving the student's writing and critical reading. Writing essays for a variety of purposes from personal to academic, including the introduction to argumentation, critical analysis, and the use of sources. (Core Texas college curriculum course)

ENGL 1302 – Composition 2 - English 4: 9018 Semesters: 1 Credits: .5 College Credits: 3 Grade: 11-12 Prerequisite: ENGL 1301

A more extensive study of the skills introduced in ENGL 1301 with an emphasis on critical thinking, research, and documentation techniques, and literary and rhetorical analysis. (Core Texas college curriculum course)

ENGL 2322 - British Literature 1: 9009Semesters: 1Credits: .5College Credits: 3Grade 12Prerequisite: ENGL 1302

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

ENGL 2323 – British Literature 2: 9010	Semesters: 1	Credits: .5	College Credits: 3	Grade 12
Prerequisite: ENGL 2322				

A survey of the development of British literature from the Romantic period to the present. Students will study work of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

ESOL English 1: 1982	Semesters: 2	Credits: 1	Grade: 9
Prerequisite: Committee approval			

This course is designed to help limited-English-speaking students with their language concepts. It is designed as a transition course to provide additional assistance in English. It can also be used as one English credit.

ESOL Reading 1: 1983	Semesters: 2	Credits: 1	Grade: 9
Prerequisite: Committee approval			

This course is designed to help limited-English speaking students with their reading concepts. It is designed as a transition course to provide additional assistance in English

ESOL English 2: 2903	Semesters: 2	Credits: 1	Grade: 10
Prerequisite: ESOL English I and committee approval			

This course is designed to help intermediate to advanced English learners with their language concepts. It is designed as a transition course to provide additional assistance in English. It can also be used as one English credit.

ESOL Reading 2: 2904	Semesters: 2	Credits: 1	Grade: 10
Prerequisite: ESOL Reading I and committee approval			

This course is designed to help intermediate to advanced English learners with their reading concepts. It is designed as a transition course to provide additional assistance in English.

Professional Communications: 1967/9643	Semesters: 1	Credits: .5	Grade: 9-12
Prerequisite: None			

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

SAT/ACT Prep: 2905/9016	Semesters: 1	Credits: .5	Grade: 10-12
Prerequisite: none			

This course will teach students the format of the test and provide both strategies and practice for questions on critical reading, sentence completion, grammar, usage, and writing. In addition to reviewing topics from pre-algebra, algebra, and geometry, students will become familiar with the format of the test and learn strategies. This course will also include a discussion of the effective use of a graphing calculator. Students taking this course will need to provide their own graphing calculator.

Yearbook: 2906, 9	9033, 9034	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite: Er	nglish 1 and Teacher Approval			

This course is organized for the purpose of creating and editing the school yearbook.

# FOREIGN LANGUAGE 2 CREDITS REQUIRED FOR GRADUATION

Spanish 1: 1939	Semesters: 2	Credits: 1	Grade: 9-12
Prereguisite: None			

Note: Heritage Spanish students should not take this course. To determine whether you are a Heritage Spanish student, see the profile prior to the Spanish for Spanish Speakers 1 course description.

This course serves as an introduction to the Spanish language and culture. Basic listening, speaking, reading, writing, viewing and presentation skills are developed. Communication skills are the primary focus of this course. At the end of level 1, students will be able to express themselves and engage in simple conversation in Spanish within the limits of their knowledge of vocabulary and structure. Middle School students at Grades 7 or 8 who have received credit for Spanish 1 cannot repeat it at the high school level for credit.

Spanish for Spa	anish Speakers 1: 1985	Semesters: 1	Credits: 1	Grade 9-12
Prerequisite:	Demonstrated proficiency			

An accelerated Spanish course designed for native and heritage speakers to cover all regular Spanish 1 TEKS, but delivered in the target language, with a deeper study of Hispanic culture to fulfill the Spanish 1 credit in one semester.

Spanish 2: 1940	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite: Spanish 1			

The basic skills learned in Spanish 1 are broadened to include all verb tenses and grammatical structures, in addition to a greatly expanded vocabulary. Listening, speaking, reading, writing, viewing and presentational skills are stressed with an emphasis on oral language proficiency. While knowledge of other cultures, connections to other disciplines, comparisons between languages and cultures, and community interactions all contribute to and enhance the communicative language learning experience, communicative skills are the primary focus of this course.

Spanish for Spanish Speakers 2: 1986Semesters: 1Credits: 1Grade 9-12Prerequisite:Spanish 1Demonstrated proficiency

An accelerated Spanish course designed for native and heritage speakers to cover all regular Spanish 2 TEKS, but delivered in the target language, with a deeper study of Hispanic culture to fulfill the Spanish 2 credit in one semester.

Honors Spanish 2:1941Semesters:2Credits:1Grade:9-12Prerequisite:85 average in Spanish 1, Spanish teacher approval and desire to continue study in Honors Spanish 3,Spanish 4 AP, and Spanish 5 AP.

NOTE: If you have been placed in this course, be sure to read the acceleration policy for Spanish credit that follow.

Students continue to further develop and improve listening, speaking, reading and writing skills. Emphasis is placed on comprehension of Spanish, as well as, reading and writing practice in the target language using a variety of activities incorporating familiar vocabulary and structures.

 SPAN 1411 – Spanish II: 1972
 Semesters: 1
 Credits: .5
 College Credit: 3
 Grade: 9-12

 Prerequisite:
 Spanish 1

 Proficiency Test Required
 Satisfactory test score on TSI Assessment and HCC application

Designed for Hispanic-American and other students from a Spanish speaking background. Emphasis on basic skills in reading, spelling, and composition. Grants .5 high school Spanish 2 credit.

SPAN 1412 – S	panish II: 1989	Semesters: 1	Credits: .5	College Credit: 3	Grade: 9-12
Prerequisite:	Spanish 1				
	SPAN 1411				
	Proficiency Test Required				
Satisfactory test score on TSI A		Assessment and H	HCC application	1	

Continuation of SPAN 2313. Continued development of reading and writing skills and control of universal Spanish style. **Grants .5 high school Spanish 2 credit.** 

Spanish 3: 194	2/9504	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	Spanish 1 and Spanish 2			

This course emphasizes developing confidence in speaking through intensive conversation practice. Students will use Spanish as the principal means of communication during class. In addition to oral conversations, dialogues and presentations, students are required to write essays in Spanish and present research on a variety of cultural topics. A stronger emphasis is placed on reading comprehension ability. Students will read a variety of authentic selections in Spanish and learn to derive meaning through inference and discussions.

Honors Spanish 3:1943/9509Semesters: 2Credits: 1Grade: 9-12Prerequisite:85 average in Spanish 2 Honors<br/>Spanish teacher approval and desire to continue study in Spanish 4 AP and Spanish 5 APGrade: 9-12

The communication skills that deal with real world topics and solving daily problems through conversational exchange are emphasized. Vocabulary is extensive. Advanced grammar is covered mainly through application of the spoken language and reading; writing is used to reinforce the spoken language. Cultural practices and products are integrated in Literature, History and Geography of the Spanish-speaking countries.

Advanced Plac	ement Span 4 – Lang: 2907/9505	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	85 average in Honors Spanish 3			
	Spanish teacher approval			
	Must meet AP criteria			
	All students must take the AP exam in	the spring.		

Spanish 4 AP course gives the students the opportunity to comprehend Spanish spoken formally and informally. Emphasis is placed on the student's ability to compose expository passages and to express ideas orally with accuracy and fluency. The acquisition of advanced vocabulary from authentic texts and a grasp of structures allow the student to read newspapers, magazine articles, and literature with ease and accuracy. This course will prepare the students for the College Board Advanced Placement Spanish Language examination. Semesters: 2

Credits: 1

Grade: 9

Advanced Placement Spanish 5 – Literature: 9506 Prerequisite: AP Spanish 4 85 average in AP Spanish 4 Must meet AP criteria All students must take the AP exam in the spring.

This course is a comprehensive study of several genres of Hispanic literature. The specific goal of this course is to prepare students for the AP Spanish Literature Exam of the College Board. Students will read, analyze and discuss short stories, poetry and novels in the Spanish language. Students will also be responsible for keeping a journal in which essays on assigned topics will be written. This course will prepare the students for the College Board Advanced Placement Spanish Literature examination.

#### Acceleration Policy for Speakers of Foreign Languages and Verification of Credit

Speakers of Languages Other Than English (LOTE) taught at Stafford can take credit by exam tests to receive credit for courses.

1. The Foreign Language department chair administers the credit by exam for each level of the language for which the student desires to earn credit. The student will receive the individual grade earned for each exam. 2. The Foreign Language department chair will then forward the grade(s) earned from each credit by exam to both the registrar and the student's counselor.

- 3. If the student receives an average of at least 85, he/she may receive 1 credit.
- 4. If the student receives credit for level 2 or 3, he/she can receive 1 credit for the level below.
- 5. Students cannot receive more than 2 credits by exam test.

#### MATH **4 CREDITS REQUIRED FOR GRADUATION**

"Finishing a mathematics course beyond Algebra 2 more than doubles the odds that a student who enters post-secondary education will successfully complete it." – US Department of Education

NOTE: Students may be required to take specialized mathematics courses based on individual performance on state required assessments.

Algebra I: 1904 Semesters: 2 Credits: 1 Prerequisite: None

Students will build upon the mathematical foundation as presented in K-8. This course deals with concepts and skills used in solving problems involving real-world and mathematical situations, linear equations and inequalities in one- and two-variables, polynomials, quadratic functions, linear and non-linear functions, and data analysis.

Geometry: 1907	Semesters: 2	Credits: 1	Grade: 9-10
Prerequisite: Algebra I			

This course deals with properties and theorems related to lines, planes, angles, polygons, circles, coordinate geometry, geometric solids, transformations, logic and measurement. The use of manipulative and technology will be stressed to help promote geometric thinking.

Honors Geome	etry: 1908	Semesters: 2	Credits: 1	Grade: 9-10
Prerequisite:	Algebra I			
	Must meet Honors criteria and sign contract of commitment			

This course will offer a more in-depth view of Geometry, along with more difficult geometric concepts. Higher level thinking skills will be stressed involving more complex reasoning such as in geometric proofs.

Mathematical Models with Applications: 2908/9206Semesters: 2Credits: 1Grade: 10-11Prerequisite:Algebra I and Geometry

Students will use algebraic, graphical, and geometric reasoning. They will also use probability and statistics to recognize patterns and structures and to model information in order to solve problems from various disciplines. Models will be used to solve real-life problems involving money, data, chance, patterns, music, design, and science.

Algebra 2: 1905/9204Semesters: 2Credits: 1Grade: 10-12Prerequisite:Algebra 1 and Geometry with a final grade of 75 or higher recommendedGrade: 10-12

This course stresses concepts and skills associated with mathematical structure, relations and functions coordinate geometry, conic sections, polynomials, quadratic and square root functions, rational functions, exponential and logarithmic functions and data analysis. Graphing calculators and computers will be used where appropriate. (TI-84 graphing calculators are suggested for use in this course.)

Honors Algebr	a 2: 1906/9205	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Algebra 1 and Geometry			
Must meet Honors criteria and sign contract of commitment				

This course will offer a more in-depth view of Algebra 2 and will be conducted at an accelerated pace from regular Algebra 2.

Pre-Calculus: 9207		Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Algebra 1, Geometry, and Algebra 2			

Students will explore the following various functions: polynomial, rational, exponential, logarithmic, and trigonometric. They will use graphing calculators and computers along with algebraic manipulations. (TI-84 graphing calculators are suggested for use in this course.)

Honors Pre-Calculus:9208Semesters:2Credits:1Grade:11-12Prerequisite:Algebra 1, Geometry, and Algebra 2, with a final grade average of 80 or higher recommended

This course is designed to prepare college-bound students for a first course in calculus. It combines the topics of trigonometry, elementary analysis, and analytic geometry. It builds on the concepts and skills learned in Algebra 1, Algebra 2, and Geometry. An intuitive base and some working tools for the study of more advanced mathematics are developed. (TI-84 graphing calculators are suggested for use in this course.)

Math 1314 - College Algebra: 9235Semesters: 1Credits: .5College Credits: 3Grade: 11-12Prerequisite:Algebra 2Satisfactory test score on TSI Assessment and HCC applicationGrade: 11-12

Topics include quadratics, polynomial, rational, logarithmic and exponential functions, system of equations, progression, sequences and series, matrices and determinants. A departmental final examination will be given in this course.

Math 1316 - Trigonometry:9234Semesters:1Credits:.5College Credits:3Grade:11-12Prerequisite:Math 1314Satisfactory test score on TSI Assessment and HCC applicationGrade:11-12

Topics include solutions of triangles, Euler identity, graphing of trigonometric and inverse trigonometric functions, identities, trigonometric equations and an introduction to vector analysis. (Core Texas college curriculum course)

AP Calculus AB	: 9223	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Pre-Calculus			
	Must meet AP criteria.			

This is a fifth-year course in a sequence beginning with Algebra 1. It is for college-bound students who plan to enter college requiring a strong mathematics background. This course is designed to prepare students for the Calculus AB Advanced Placement Test.

 AP Statistics:
 9212
 Semesters: 2
 Credits: 1
 Grade: 11-12

 Prerequisite:
 Algebra 2 with a final grade average of 80 or higher recommended
 Must meet AP criteria
 Grade: 11-12

This course introduces students to the major concepts for collecting, analyzing, and drawing conclusions from data. Students who successfully pass the advanced placement test given in May receive 3 hours of college credit. Mathematically able students are encouraged to take both AP Statistics and AP Calculus.

# SCIENCE 4 CREDITS REQUIRED FOR GRADUATION

Biology: 1910 Prerequisite: None	Semesters: 2	Credits: 1	Grade: 9-10				
Students will gain an understanding of the relationships of different forms of life as they function in their environment. This laboratory-oriented course will cover such topics as the structure and function of cells, growth and development of organisms, genetics, ecology, taxonomy, metabolism and energy transfers in living organisms, the study of living systems and homeostasis. Students will use the scientific method throughout the course and will be expected to conduct themselves appropriately in the laboratory.							
Honors Biology: 1911 Prerequisite: Must meet Honors criteria and sigr	Semesters: 2 contract of commitmen	Credits: 1 t	Grade: 9				
The course will offer a more in-depth view of regular Biology. Students may be transferred to Regular Biology based on conditions previously stated. Students will use the scientific method throughout the course and will be expected to conduct themselves appropriately in the laboratory.							
Integrated Physics and Chemistry (IPC): 1913 Prerequisite: Algebra I or concurrent enrollment	Semesters: 2	Credits: 1	Grade: 9-10				
This course is an introduction to Chemistry and Physics in which students will conduct field and laboratory investigations. It will prepare them to take Biology, Chemistry 1 and Physics 1. Topics such as motion, waves, energy transformations, properties of matter, and changes in matter and solution chemistry will be taught. Students will use the scientific method throughout the course and will be expected to conduct themselves appropriately in the laboratory.							
Chemistry: 2910/9307	Semesters: 2	Credits: 1	Grade: 10-11				

Prerequisite: Algebra I Completion of one unit of high school science Algebra II or concurrent enrollment

Chemistry is a mathematically-based laboratory and field-oriented course which includes a study of topics such as measurement systems, atomic structures, chemical bonding, writing formulas and equations, gas laws, acids and bases, and solutions. Laboratory and field investigations will emphasize the use of process skills and safety. Students will use the scientific method throughout the course and will be expected to conduct themselves appropriately in the laboratory. Scientific calculators are strongly suggested for this class (TI 83 or 84 graphing calculators).

Honors Chemis	stry: 2911/9306	Semesters: 2	Credits: 1	Grade: 10-11
Prerequisite:	Algebra I Completion of one unit of high school s Must meet Honors criteria.	science		

This course will offer a more in-depth view of regular Chemistry 1. Students will use the scientific method throughout the course and will be expected to conduct themselves appropriately in the laboratory. TI 84 graphing calculator are strongly suggested for this course. Students must complete a summer assignment before beginning Honors Chemistry 1 in the fall.

Physics 1: 9309Semesters: 2Credits: 1Grade: 11-12Prerequisite:Algebra I and completion of two units of high school science.Grade: 11-12

This course will be laboratory and field-oriented. It will cover measurements, velocity and acceleration, motion, force, energy, heat, sound, magnetism, electricity, and light. Students will use the scientific method throughout the course and will be expected to conduct themselves appropriately in the laboratory. TI 84 calculator are suggested for use in this class.

Honors Physics 1: 9310Semesters: 2Credits: 1Grade: 11-12Prerequisite:Algebra I and completion of two units of high school science.Grade: 11-12

This is a first-year course that studies matter, forces, energy and their interactions. Students are introduced to fundamental concepts in the areas of mechanics, heat, sound, electricity, magnetism and lights. Observations of the laws of force and motion, the nature of light, wave phenomena, and properties of electricity and magnetism are integral components of the course.

Forensic Scien	ce: 9319	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Biology and Chemistry			

NOTE: To receive credit in science, students must meet the 40% laboratory and fieldwork requirement identified in §74.3(b) (2) (C) of the Texas Education Code

This course is designed to challenge students with topics such as fingerprinting, DNA analysis, blood typing and spattering, trajectories (for ballistics as well as blood spattering) comparative anatomy, and chemical analysis of drugs, poisons, and trace evidence, and the dynamics of Physics.

Anatomy & Physiology of Human Systems:9312Semesters:2Credits:1Grade:11-12Prerequisite:Completion of three years of high school science course work.Credits:111

This course is designed to introduce students to the structure and function of the human body. The gross anatomy on the organism level, microanatomy on the cellular level, and the physiological functioning of organ systems will be emphasized. Maintenance of homeostasis and the causes of disease will be studied. Limited organ and animal dissections as well as microscopic and physiological studies will be performed. Students will be expected to conduct themselves appropriately in the laboratory.

AP Biology: 93	304	Semesters: 2	Credits: 1
Prerequisite:	Biology and Chemistry		
	Must meet AP criteria and sign contra	ct of commitment	
	Students must sit for the AP test in the	e Spring	

This course is designed to give students a more in-depth study of Biology. The course prepares students for the AP Biology examination and is taught at the college level using a college level text. Topics taught are tied together by unifying themes, which will be analyzed. Topics covered include chemistry of life cells and energetic, genetics, evolution, diversity of life, structure and function of living organisms and ecology. The laboratory portion of the course will consist of 12 required AP biology labs. Students will be expected to conduct themselves appropriately in the laboratory. **Students will be required to perform one to one half hours a week after school labs.** 

Grade: 11-12

BIOL 1306/1106 – Biology: 9325 Semesters: 1 Credits: 1 College Credits: 4 hours Grade: 11-12 Prerequisite: Biology and Chemistry Satisfactory test score on TSI Assessment and HCC application

This course is designed to give students a more in-depth study of Biology. Discussions focus on biological chemistry, biological processes, cellular morphology, metabolism, genetics, and molecular biology. Students will be expected to conduct themselves appropriately in the laboratory. **Students will attend class at HCC Southwest. This course requires two class periods.** 

BIOL 1407 - Biology: 9326Semesters: 1Credits: 1College Credits: 4 hoursGrade: 11-12Prerequisite:BIOL 1306/1106

Topics include evolution, classification and ecological relationships, and organ systems of animals and plants. Students will be expected to conduct themselves appropriately in the laboratory. **Students will attend class at HCC Southwest. This course requires two class periods to satisfy HCC lab requirements.** 

AP Chemistry:	9316	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Chemistry and/or Physics			
	Must meet AP criteria and sign contrac	t of commitment		
Students must sit for the AP test in the Spring		Spring		

AP Chemistry is a laboratory-oriented course, which will allow the student the opportunity to work with chemistry laboratory equipment and to study principles and concepts of a first-year college chemistry course. Students will be able to demonstrate advanced-laboratory techniques. Areas of study such as atomic structure, reactions, stoichiometry, thermodynamics equilibrium and quantitative analysis are explored in-depth. Students will use the scientific method throughout the course and will be expected to conduct themselves appropriately in the laboratory. Students will review basic laboratory techniques and learn advanced laboratory techniques, such as UV-vies spectroscopy; Wrinkler titration for dissolved oxygen, electrophoresis, statistical analysis of collected data, and preparation of standard solutions given. Laboratories will be conducted on topic as prescribed by the College Board. Areas of study such as atomic structure, reactions, stoichiometry, thermodynamics equilibrium and quantitative analysis are explored in-depth. Students will use the scientific method throughout the course, and will be expected to conduct themselves appropriately in the laboratory is atomic structure, reactions, stoichiometry, thermodynamics equilibrium and quantitative analysis are explored in-depth. Students will use the scientific method throughout the course, and will be expected to conduct themselves appropriately in the laboratory. **Students will use** the scientific method throughout the course, and will be expected to conduct themselves appropriately in the laboratory. **Students will be required to perform one to one half hours a week after school labs.** 

AP Physics: 93	21	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Biology, Chemistry and Physics Must meet AP criteria and sign contrac Students must sit for the AP test in the			

AP Physics covers major areas of physics. Students learn to think like scientists: making predictions based on observations, writing hypothesis, designing and completing experiments, and reaching conclusions based on the analysis of data derived from these experiments. Students apply the concepts of physics to their everyday experiences and current events and issues in science and engineering. The course provides opportunities for guided inquiry and student-centered learning to foster critical thinking skills. **Students will be required to perform one to one half hours a week after school labs.** 

# SOCIAL STUDIES 4 CREDITS REQUIRED FOR GRADUATION

World Geography: 1916	Semesters: 2	Credits: 1	Grade: 9
Prerequisite: None			

Students will examine people, places, and environments from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present. A significant portion of the course centers around the physical processes that shape patterns in the physical environment; the political, economic, and social processes that shape cultural patterns of regions the distribution and movement of population; relations among people, places and environments; and the concept of region. Students analyze how location affects economic activities in different economic systems. Students analyze how culture shapes the characteristics of regions and analyze the impact of technology and human changes on the environment.

Honors World Geography: 1917Semesters: 2Credits: 1Grade: 9Prerequisite:NoneMust meet Honors criteria and sign contract of commitment

This is a college prep course stressing advanced placement concepts concerning writing, analysis and higher-level thinking skills. In this course, students examine people, places and environments from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present. Students study the physical processes and their interrelationships. Students analyze how location affects economic activities and identify the processes that affect political divisions and different points of view. Students compare how cultural components shape regions.

AP Human Ge	ography: 1918	Semesters: 2	Credits: 1	Grade: 9
Prerequisite: Masters level on 8 <sup>th</sup> grade Social Studie Masters level on 8 <sup>th</sup> grade Reading STA				
		STAAR test		
	Must meet AP criteria and sign con	gn contract of commitment		
Students must sit for the AP test in		the Spring		

This is a college level course that includes the systematic study of patterns and processes that have shaped the Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. Students will also explore the geographic methods and tools geographers used to interpret maps and analyze geospatial data; understand and explain the implications of associations and networks among phenomena in places; recognize and interpret the relationships among patterns and processes at different scales of analysis; define regions and evaluate the regionalization process; and characterize and analyze changing interconnections among places. NOTE: When completed for one credit, this course may be used as a substitute for World Geography.

World History:	2909	Semesters: 2	Credits: 1	Grade: 10
Prerequisite:	World Geography			

World History is the only course that offers students an overview of the entire history of humankind. The major emphasis is on the study of significant people, events and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as civilizations in other parts of the world. Students will be involved in individual and group research projects, outside readings, presentations and problem-solving activities, and current events.

Honors World	History: 2912	Semesters: 2	Credits: 1	Grade: 10
Prerequisite:	World Geography			
	Must meet Honors criteria and sign contract of commitment			

This course is a college preparatory class with special emphasis placed on higher-level cognitive skills and proficient use of written communication. The major purpose of this course is to provide a survey that will assist students in understanding their own times. The students will be required to use analysis, synthesis, and evaluation skills to understand and to relate them to the complicated problems the world faces today.

AP World Histo	ory: 1909	Semesters: 2	Credits: 1	Grade: 10
Prerequisite:	AP Human Geography			
	Must meet AP criteria and sign contrac	t of commitment		
	Students must sit for the AP test in the	Spring		

This is a college level course that includes a survey of the history of humankind, with major emphasis on the study of significant people, events, and issues from the 13<sup>th</sup> Century to the present. Students will use historical inquiry to research, interpret, and use multiple sources of evidence.

U.S. History: 9404	Semesters: 2	Credits: 1	Grade: 11
Prerequisite: World Geography or World History			

This course is a year's study of significant people, lessons, and events after the period of Reconstruction. This is the second part of a two-year study of U.S. history that begins in grade 8. Historical content focuses on the political, economic, and social events and issues related to industrialization and urbanization, major wars, domestic and foreign policies of the Cold War and post-Cold War eras; and reform movements including civil rights. Students examine the impact of geographic factors on major events. Students use critical-thinking skills to explain and apply different methods that historians use to interpret the past, including points of view and historical context.

 AP U.S. History: 9405
 Semesters: 2
 Credits: 1
 Grade: 11

 Prerequisite:
 World Geography or World History
 Must meet AP criteria and sign contract of commitment
 Free commitment
 Students must sit for the AP test in the Spring

This is a college level survey course of history from Colonization to the present. Students will participate in group and individual projects, historical issues, presentations and problem-solving activities. Students who have demonstrated exceptional mastery of previous social studies courses and desire coursework preparing them for college should find this course stimulating. The Advanced Placement Program for U.S. History is designed to provide students with analytic skills and factual knowledge necessary to deal critically with the growth and development of America's political, economic, and social institutions from 1492-Modern day. Students should learn to assess historical materials – their relevance to a given problem, their reliability, and their importance and to weigh the evidence and interpretations presented in historical scholarship. This course will prepare students to take the College Board Advanced Placement Test in May.

 HIST 1301 – U.S. History: 9406
 Semesters: 1
 Credits: .5
 College Credits: 3 hours
 Grade: 11

 Prerequisite:
 World Geography and World History
 Satisfactory test score on TSI Assessment and HCC application
 Grade: 11

This course is a study of the American nation from the English colonization to the close of the Civil War through Reconstruction, including exploration and colonization of the new world, the American Revolution, westward expansion, the civil War, and Reconstruction. (Core Texas college curriculum course)

HIST 1302 – U.S. History: 9407Semesters: 1Credits: .5College Credits: 3 hoursGrade: 11Prerequisite:HIST 1301

This course is a study of the American nation from the end of the Reconstruction Era to the present. Topics include big business, big labor, the United States as a world power, the Great Depression and the Cold War. (Core Texas college curriculum course)

U.S. Government: 9408Semesters: 1Credits: .5Grade: 12Prerequisite:U.S. History and World Geography or World History

This course covers forms of government, functions and responsibilities of government, individual's role, political heritage, historical documents, federalism, freedoms, branches of government and checks and balances, political

parties, election process, judicial process, local and state governments. Students will examine current governmental issues and events.

Govt 2305 – Government:9410Semesters:1Credits:.5College Credits:3 hoursGrade:12Prerequisite:U.S. History and World Geography or World History<br/>Satisfactory score on TSI assessment and HCC applicationSatisfactorySatisfactory

A study of theories of American democracy and other ideologies, United States and Texas Constitutions, federalism, state and local government, political economy, political socialization and public opinion, the media, interest groups, political parties and elections.

 AP U.S. Government & Politics: 9417
 Semesters: 1
 Credits: .5
 Grade: 12

 Prerequisite:
 U.S. History and World Geography or World History

 Must meet AP criteria and sign contract of commitment
 Students must sit for the AP test in the Spring

This course will offer a more in-depth view of regular American Government strategies. It will include an in-depth analysis of concepts, issues and problems associated with the structure and function of government and the development of political behavior and philosophies. This course will prepare students to take the College Board Advanced Placement exam.

Economics: 9411Semesters: 1Credits: .5Grade: 12Prerequisite:U.S. History and World Geography or World History

This course deals with micro- and macroeconomics, economic organization, economic systems, decision making, competition and market structures, supply and demand, financial institutions, government spending, taxes, banking, the stock market, advertising, the world economy and creating your own copy with computer-generated competition.

AP Economics:	9412	Semesters: 1	Credits: .5	Grades: 12
Prerequisite:	U.S. History and World Geography or V	Norld History		
	Must meet AP criteria and sign contrac	ct of commitment		
	Students must sit for the AP test in the	Spring		

This course will offer a more in-depth view of regular Economics. Students will take part in a more comprehensive study of economics and the free enterprise system, which involves problem-solving and analysis of macroeconomic principles. Group and individual projects, presentations and outside readings are expected in this class. This course prepares students to take the College Board Advanced Placement exam.

Econ 2301 – Ec	conomics: 9421	Semesters: 1	Credits: .5	College Credits: 3 hours	Grade: 12
Prerequisite:	U.S. History and World	l Geography or V	Vorld History		
	Satisfactory score on T	SI assessment a	nd HCC applicati	on	

Macroeconomics examines the fundamentals of the American economy as it relates to social welfare. Emphasis is on basic economic concepts and theories as they affect domestic and international markets. This course integrates behavioral social sciences to present solutions to real world problems. Macroeconomics includes measurements of GDP,

fiscal and monetary policy. This course will help you to understand the kinds of markets businesses operate in as well as how firms maximize profit s subject to constraints. There are many real-world applications of this course in game theory, industrial organization, environmental economics, anti-trust law and other areas.

Psychology: 9415	Semesters: 1	Credits: 0.5	Grade: 11-12
Prerequisite:	None – Suggested Elective for Education Academy		

This course introduces students to the scientific study of behavior and mental processes of humans. Students will continue to develop their critical thinking skills and communications skills through the research of relevant topics in psychology.

Sociology: 9416Semesters: 1Credits: 0.5Grade: 11-12Prerequisite:None - Suggested Elective for Education Academy

Students will develop an understanding and be able to apply sociological concepts and perspectives concerning human groups that include attention to socialization, culture, organization, stratification and societies. Students will gain an understanding of the factors that contribute to individual identity and development and identify how culture defines individual rights and responsibilities.

AP Psychology	: 9422	Semesters: 1	Credits: 0.5	Grade: 11-12
Prerequisite:	Must meet AP criteria and sign contrac	t of commitment		
	Students must sit for the AP test in the	Spring		

This is a college level course that includes an introduction to the systematic and scientific study of the behavior and mental process of human beings and other animals. Students are exposed to the psychological facts, principles and phenomena associated with each of the major subfields within psychology. Students also learn about the methods psychologists use in their science and practice.

Personal Financial Literacy: 2913/9558		Semesters: 1	Credits: 0.5	Grade: 10-12
Prerequisite:	None			

Students will begin to develop the skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy. This course will start students on a path toward being in control of their financial futures. Five broad topics will be the foundation of the course: college and career planning, money management, savings and investing, income, and spending. The course will teach students to search and assess college and career opportunities, identify and prioritize their personal money management goals, develop personal spending and savings plans, comprehend the impact of time on the value of money, understand the cost of using credit, and protect assets.

# FINE ARTS 1 CREDIT REQUIRED FOR GRADUATION

ART

Credits: 1

Grade: 9-12

Art I: 1944/9809 Prerequisite: None Semesters: 2

Credits: 1

Students may fulfill fine arts and elective requirements for graduation by successfully completing the art course. Four basic strands - perception, creative expression and performance, historical and cultural heritage, and critical evaluation - provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students rely on their perceptions of the environment, developed through increasing visual awareness and sensitivity, memory, imagination, and life experiences as a source for creating artworks. They express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.

 Art 2: 1945/9810
 Semesters: 2
 Credits: 1
 Grade: 9-12

 Prerequisite:
 Art 1
 Grade: 9-12
 Grade: 9-12

Students may fulfill fine arts and elective requirements for graduation by successfully completing one or more art courses. Four basic strands - perception, creative expression and performance, historical and cultural heritage, and critical evaluation - provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students rely on their perceptions of the environment, developed through increasing visual awareness and sensitivity to surroundings, memory, imagination, and life experiences as a source for creating artworks. Students will express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.

Art 3: 2914/9812Semesters: 2Credits: 1Grade: 10-12Prerequisite:Art 1 and Art 2

Students may fulfill fine arts and elective requirements for graduation by successfully completing one or more art courses. Four basic strands - perception, creative expression and performance, historical and cultural heritage, and critical evaluation - provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students rely on their perceptions of the environment, developed through increasing visual awareness and sensitivity to surroundings, memory, imagination, and life experiences as a source for creating artworks. Students will express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.

Art 4: 9813		Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Art 1, Art 2, and Art 3			

Drawing extends the student's artistic understanding and experiences as introduced in Art 3. Emphasis will be placed on the advanced development of compositional skills and imaginative use of the elements and principles of design in

Page **42** of **78** 

advanced drawing. This class is designed to develop the student's commitment to a self-determined area of special interest. Students will apply advanced drawing tools and techniques to develop a series of artwork based on a personal style and theme. Art appreciation, self-evaluation, and higher-level problem-solving skills are emphasized. The history and the analysis of drawing will be emphasized.

Art History 130	03 – Civilization 1: 9816	Semesters: 1	Credits: .5	College Credits: 3	Grade: 12
Prerequisite:	Art 1, Art 2 and Art 3				

This course examines painting, sculpture, architecture and related arts covering the Paleolithic through Gothic periods. Also covered is the art of non-western cultures. This course is a dual credit course and satisfies the fine arts or component area option of the HCC core.

Art History 1304 – Civilization 2: 9817		Semesters: 1	Credit: .5	College Credits: 3	Grade: 12
Prerequisite:	Art History – Civilization 1				

This course examines painting, sculpture, architecture and related arts from the Early Renaissance through the Twentieth Century. Also covered is the art of non-western cultures. This course is a dual credit course and satisfies the fine arts or component area option of the HCC core.

# BAND

Band is a full-year course. The fall semester of marching band each year may be substituted for PE. If used in that manner, only the Spring semester counts toward the Fine Arts credit.

Band 1: 1946	Band 2: 2915	Band 3: 9807	Band 4: 9808	
Band Prerequisites: By Audi	tion	Semesters: 2	Credits: 1	Grade: 9-12

Course Requirements: Students must commit to working to benefit the entire band through their efforts during class time and in extra-curricular rehearsals and performances, as planned by the director. They are expected to be physically, mentally, and musically well-disciplined and to embody the highest standards of self-discipline and self-control.

Performances by the band will include concerts on and off campus, marching region band and subsequent competitive auditions, UIL marching, solo, ensemble, concert and sight reading contests, as well as other activities planned by the director.

Other: One semester of PE credit is offered for participation in each fall semester. One semester of fine arts credit is offered for participation in each spring semester. Due to physical and artistic requirements required for successful band performance, students are encouraged to remain in the band throughout both semesters of the year. Students are encouraged to study their instruments privately, with a teacher that is approved by the director. Students in good standing at the conclusion of their fourth consecutive semester of band participation which would include two semesters of UIL marching participation, typically earn a letter jacket that is awarded at the decision of the director.

Page **43** of **78** 

Instrumental music instruction is separated into two components - marching band and band. The four basic strands of music study perception, creative expression and performance, historical and cultural heritage, and critical evaluation, provide broad, unifying structures to foster student learning within both the marching and concert units. In band, students develop their intellect, refine their emotions, understand the cultural and creative nature of musical artistry and make connections among music, the other arts, technology, and other aspects of social life. Through creative performance, students apply the expressive technical skills of music and critical-thinking skills to evaluate multiple forms of problem solving. Enrichment activities available to all students include Region Band auditions, solo, and small ensemble experiences designed to enhance student learning.

The Color Guard participates with the marching band during the fall semester and earns P.E. credit. Students are selected by audition and instructor approval in addition to color guard camp experience. A required fee is set by the band director for this opportunity. Students will learn dance movements and will be taught to twirl flags, sabers, etc. Color Guard members must perform at all football games, parades, and other performances relating to the guard.

# CHOIR

Choir 1: 1947	Choir 2: 2916	Choir 3: 9827	Choir 4: 9828		
Concert Choir Prerequisite:	By Audition	Sem	esters: 2	Credits: 1	Grade: 9-12

This year-long class is designed to introduce students to the fundamentals of vocal music production. Emphasis is placed on the development of vocal skills, music theory, music appreciation vocal production and technique of mastering the voice as an instrument. Performances in UIL contests, and concerts, and the Spring "Pop" Show are "mandatory" requirements for a grade. All- State Choir try-outs, UIL Solo Contests and the end of the year Broadway Musical are "optional" but encouraged. The four basic strands of music are study perception, creative expression and performance, historical and cultural heritage, and response/evaluation. Participation in vocal music provides students with the necessary skills to develop intellectually, emotionally, while they demonstrate musical artistry, building a varied repertoire of music, learning to read and write music notation, etc. Students with UIL eligibility, and good standing academically receive their letter jacket at the conclusion of their fourth year in choir, provided they have participated and remained eligible all four years. Students are required to pay a nominal rental fee for the formal choir uniform consisting of a tuxedo ensemble for the men and floor-length formal gowns for the ladies. The casual choir uniform is a "purchased" choir polo style shirt and khaki slacks.

Women's Chorus	:	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite: B	y Audition			

This year-long class is designed for the female singers desiring to build and enhance their vocal ability. Emphasis is placed on the development of vocal skills through the study of three and four-part ensemble/harmony. Music theory, music appreciation vocal production and technique will be studied. As "mandated" in the Fine Arts/Vocal Music TEKS, participation in class recitals, UIL contests, concerts and other community performances is a must. Participation, however, in the UIL Solo & Ensemble contest, All-State choir auditions, the Choir Spring Pop & Broadway Show and the

end of the year Stage Musical Theatre production is expected and encouraged, but not mandatory. Students will be required to pay a nominal rental fee for choir uniforms and students will be required to provide the "character" dance shoe to wear with the formal uniform. Additionally, students are to purchase the choir tee-shirt and polo shirt that are worn for more "casual" performances.

Men's Choir:		Semester	s: 2 Credits: 1	Grade: 9-12
Prerequisite:	By Audition			

This year-long class is designed for the male singers desiring to build and enhance their vocal ability. Emphasis is placed on the development of vocal skills through the study of three and four-part ensemble/harmony. Music theory, music appreciation vocal production and technique will be studied. As "mandated" in the Fine Arts/Vocal Music TEKS, participation in class recitals, UIL contests, concerts and other community performances is a must. Participation, however, in the UIL Solo & Ensemble contest, All-State choir auditions, the Choir Spring Pop & Broadway Show and the end of the year Stage Musical Theatre production is expected and encouraged, but not mandatory. Students will be required to pay a nominal rental fee for choir uniforms and students will be required to provide the "character" dance shoe to wear with the formal uniform. Additionally, students are to purchase the choir tee-shirt and polo shirt that are worn for more "casual" performances.

Varsity Choir:Semesters: 2Credits: 1Grade: 9-12Prerequisite:Two years (2) of Stafford High School Choir and audition processGrade: 9-12

This year-long choir class is only for the advanced and serious vocal student who has had at least two (2) years of vocal music and has advanced and progressed steadily in the choir program. Student has participated in all UIL contests in previous years, including UIL solo and ALL-State Process. Student must be in good academic standing, with at least a 2.5 + grade average and must show qualities of self-motivation, time management. Student must be able to sight-read with accuracy, and his/her voice must be mature, developed. Mandatory participation in all UIL competitions, including UIL Solo/Ensemble All-State Choir, UIL Concert & Sight Reading, the Choir's musical stage production, the Broadway/Pop show. Other required performances, events include: singing anthem at sports events, open house, and other "invited" opportunities throughout the year. The four basic strands of music study perception, creative expression and performance, historical and cultural heritage, and response/evaluation, participation in vocal music provides students with the necessary skills to develop intellectually, emotionally, while they demonstrate musical artistry, building a varied repertoire of music, learning to read and write music notation, etc.

Readiness for this advanced class will be measured in the following areas:

Tone quality (control, clarity, projection, blend) Intonation (breath support, intervals, control) Diction (vowel purity, consonants, enunciation) Note accuracy (correct pitch, rhythmic, attacks/releases) Musicality (phrasing, balance, expression, nuance) Sight-read, sight singing ability

Students of UIL eligibility and good standing academically receive their letter jacket at the conclusion of their fourth year in choir, provided they have participated and remained eligible all four years. Students are required to pay a rental fee

for formal choir uniform consisting of a tuxedo ensemble for the men and floor-length formal gowns for the ladies. The casual choir uniform is a "purchased" choir polo style shirt and khaki slacks.

# DANCE

Dance 1: 1948		Dance 3: 9055			
Dance 2: 2917		Dance 4: 9056	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None				

To provide the beginning/intermediate/advanced dancer with study, further training, knowledge, and application in various dance styles with strong emphasis in terminology, proper alignment, anatomy, musicality, expression, aesthetic, dance history, and technical proficiency. The dance course is designed to provide students with opportunities to develop skills that can be used to create visual impressions. The learning of values and attitudes of oneself is also a very important part of the dance course. The nature of the course offers the cultivation of such behavior as self-discipline, creativity, working with others, leadership, fellowship, responsibility, self-pride, and appearance. During the course of the year, students of all levels of dance will also be required to be a part of public performances.

Dance Prod. 1: 1949	Dance Prod. 3: 9875			
Dance Prod. 2: 2918	B Dance Prod. 4: 9876	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite: Tryo	out and Coach Approval			

The Stafford Sensations Dance Team is open to all male and female students. Tryouts are held in the spring. Students must attend a SMSD school prior to tryouts. Summer camp is required.

# THEATRE ARTS

Theatre Arts 1:	1950/9820	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

Students will learn the basics of acting, directing, and technical issues in the theatre. No previous experience is required. The students will increase their understanding of self and others and develop clear ideas about the world.

Theatre Arts 2:	2919/9821	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Theatre Arts 1			

Students will practice advanced acting techniques, as well as learning to design and implement technical aspects of theatre. No previous experience is required. The students will increase their understanding of self and others and develop clear ideas about the world.

Theatre Arts 3:	9822	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Theatre Arts 1 & 2			

Students will practice advanced acting techniques, as well as learning to design and implement technical aspects of theatre. No previous experience is required. The students will increase their understanding of self and others and develop clear ideas about the world.

Theatre Arts 4:	9823	Semesters: 2	Credits: 1	Grade: 12
Prerequisite:	Theatre Arts 1, 2 & 3			

Students will practice advanced acting techniques, as well as learning to design and implement technical aspects of theatre. No previous experience is required. The students will increase their understanding of self and others and develop clear ideas about the world.

Theatre Production 1, 2, & 3: 2920/9824Semesters: 2Credits: 1Grade: 10-12Prerequisite:Theatre Arts 1 and Teacher ApprovalFreedom of the second seco

This gives the students an opportunity to put into practice basic skills learned in Theatre 1. The students will select, audition, cast and produce a production of their choice. The students will be responsible for all production elements of this course and will produce public performances as an end result.

# PHYSICAL EDUCATION AND HEALTH

Physical Education: 1.0 credit required for graduation

Athletics, marching band, cheerleading, dance and JROTC substitute for PE credit. The first credit will fulfill state graduation requirements for PE. An additional 3 credits can be used to fulfill elective requirements of courses taken the first year. Those courses are marching band, drill team, and cheerleading. The courses must be taken during the fall semester and will only count as P.E. equivalents.

PE/Individual S	Sports: 1937/9195	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	none			

Students enrolled in Individual Sports are expected to participate in a wide range of individual sports that can be pursued for a lifetime. The continued development of health-related fitness and the selection of individual sports activities that are enjoyable are major objectives of this course.

Athletics:		Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	Tryout and Coach Approval			

Note: Students must have a current physical on file prior to tryouts.

Classes are restricted to those students accepted into specific sports. Students interested in a particular sport should contact the coaching staff for enrollment information.

Cheerleading 1	-4: 1927, 2921, 9060, 9061	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	Tryout and Coach Approval			

Note: Students must have a current physical on file prior to tryouts.

Cheerleading at SHS is open to all male and female students. Tryouts are held the spring prior to the elected year. Students must attend a SMSD school in the spring prior to tryouts. Gymnastics, cheers chants, jumps, dancing, and stunting are among the skills perfected in this class. The fall semester of this course can count for up to 3 state elective credits. Summer camp is required.

Health: 1919/9050	Semesters: 1	Credits: .5	Grade: 9-12
Prerequisite: None			

The course focuses on positive health practices emphasizing wellness for optimal health. Topics requires by the Comprehensive Health Education Act will be covered. Other topics will focus on areas of concern for this age group.

# MILITARY SCIENCE/JROTC

JROTC 1: 1938	JROTC 3: 9803			
JROTC 2: 2938	JROTC 4: 9804	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

These courses may substitute for PE credit. The program provides leadership training and development that is essential for success in any career field. Each student's characteristics are identified through various assessment tools. Leadership values, principles, strategies and skills are taught and reinforced through case studies, team-building and other actual leadership activities. JROTC is not a recruitment program for the military and participation in the program does not incur any military obligation.

# COLLEGE AND CAREER CENTER APPROVED STATEWIDE PROGRAMS OF STUDY

The statewide programs of study contain course sequences that lead to endorsements as part of the graduation requirements set forth by the Texas Education Agency. The Statewide Program of Study initiative does not replace endorsements but adds additional support to ensure students have access to CTE programs that lead to obtaining industry recognized Level I and/or II Certifications, to in-demand, high-skills, high-wage occupations and to postsecondary education and training opportunities.



## PROGRAM OF STUDY:

The Animal Science program of study focuses on the science, research and business of animals and 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.

### Required Course Sequence:

Level I: Principles of Agriculture

Level 2: Livestock Production OR Equine Science and Small Animal Management OR Floral Design OR Agricultural Mechanics and Metal Technologies

**Level 3**: Wildlife, Fisheries and Ecology Management OR Agribusiness Management and Marketing OR Agricultural Structures Design and Fabrications

Level 4: Advanced Animal Science OR Veterinary Medicine

Principles of Agriculture, Food, & Natural Resources: 1963 Semesters: 2 Credits: 1 Grade: 9-12 Prerequisite: None

This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. Students must attain academic skills and knowledge in agriculture. This course also allows students to develop knowledge and skills through hands-on activities in career opportunities, personal development, globalization, industry standards, details, practices, and expectations.

Livestock Production: 1954/9599Semesters: 2Credits: 1Grade: 10-12Prerequisite:Principles of Agriculture, Food, & Natural ResourcesFood, & Natural ResourcesFood, & Natural Resources

Course Description: Livestock production covers all large animals. Cattle, horses, sheep, pigs, poultry, and goats are all covered in this course. Learn about different operations, animal systems and breeds of large animals. This course is the prerequisite for veterinary medical applications which will be offered the following year.

Equine Science	e: 2939/9625	Semesters: 1	Credits: .5	Grade:
10-12				
Prerequisite:	Principles of Agriculture, Food, & Natural Resources			

This course allows students to acquire knowledge and skills related to career opportunities, entry requirements, and industry expectations. This course is designed to develop knowledge and skills pertaining to the nutrition, reproduction, health, and management of the equine species. Students will analyze equine science as it relates to the selection and management of horses. Students will also learn about acceptable protocols and processes to maintain animal performance.

Small Animal Management: 2940/9646Semesters: 1Credits: .5Grade: 10-12Prerequisite:Principles of Agriculture, Food, & Natural ResourcesFood, & Natural ResourcesFood, & Natural Resources

This course allows students opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. Suggested small animals which may be studied in the course include, but are not limited to, small mammals, amphibians, reptiles, birds, dogs, and cats.

Wildlife, Fisheries & Ecology Management: 2941/9597Semesters: 2Credits: 1Grade: 11-12Prerequisite:Principles of Agriculture, Food, & Natural ResourcesLivestock Production or Equine Science and Small Animal ManagementFinal Management

This course examines the management of game and non-game wildlife species, fish, and aqua-crops and their ecological needs as related to current agricultural practices. Students will study the identification and habitat of all game and fish species. This is the perfect land and sea class as it explores professions having to do with animals and fish, land and sea and the management of both. Study includes management and production of both the land and sea and the continuing ecology. Study includes boating safety, deer hunting, duck hunting, archery, fishing, gun safety and ecology. Students may qualify for the Hunters and Boater Safety Certification.

Veterinary Me	dical Applications: 9647	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of Agriculture, Food, & Natural Reso	urces		
	Livestock Production or Equine Science and Sm	all Animal Management		
	Wildlife, Fisheries & Ecology Management			

This course allows students an opportunity to learn, reinforce, apply, and transfer knowledge and technologies in a variety of settings. Topics covered in the course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

Advanced Anir	mal Science: 9644	Semesters: 2	Credits: 1	Grade: 12
Prerequisite:	Principles of Agriculture, Food, & Natural Res	ources		
	Livestock Production or Equine Science and S	mall Animal Managemer	nt	
	Wildlife, Fisheries & Ecology Management		-	
Advanced Anir	mal Science examines the interrelatedness of h	uman, scientific, and tecl	nnological dimer	nsions of livestock
	struction is designed to allow for the applicatio		-	
•	and laboratory experiences. To prepare for care		•	
•	s and knowledge, acquire knowledge and skills			
	g career opportunities, entry requirements, and	•	3, and acvelop k	inowieuge und
Skiistegaranie	s career opportanties, entry requirements, and	r maastry standards.		
Floral Design:	1953/9642	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of Agriculture, Food, & Natural Res	ources		
·	Must continue with Floral Pathway			
This course is o	designed to develop students' ability to identify	and demonstrate the pr	rinciples and tec	hniques related to
	s well as develop an understanding of the mana	•	•	•
•	tyles and historical periods, students develop re	•	•	•
	ents will create and analyze floral designs, thus	•		
cultures. Stud	chis win create and analyze noral designs, thus	contributing to the deve	sopricit of men	

Currelline 4

Curder 12

making informed judgments and evaluations.

Advanced Antineal Category OCAA

Agribusiness N	Ianagement and Marketing: 9519	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of Agriculture, Food, & Natural Reso	urces		
	Floral Design			
	Must continue with Floral Pathway			

Agribusiness Management and Marketing is designed to provide a foundation to agribusiness management and the free enterprise system. Instruction includes the use of economic principles such as supply and demand, budgeting, record keeping, finance, risk management, business law, marketing, and careers in agribusiness. To prepare for careers in agribusiness systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to agribusiness marketing and management and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Agricultural Me	chanics and Metal Technologies: 1951/9630	Semesters: 2	Credits: 1	Grade:
10-12				
Prerequisite:	Principles of Agriculture, Food, & Natural Resource	s or Principles of Manufa	acturing	

Must continue with Agricultural Mechanics Pathway

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.

Agricultural Structures, Design and Fabrications: 2957Semesters: 2Credits: 1Grade: 10-12Prerequisite:Principles of Agriculture, Food, & Natural Resources or Principles of Manufacturing<br/>Agricultural Mechanics and Metal Technologies<br/>Must continue with Agricultural Mechanics PathwayManufacturing

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.



# PROGRAM OF STUDY

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 and creating special effects, animation or other visual images using film, video, computers and other electronic tools and media, for use in computer games, movies, music videos and commercials.

Level I Certificate – Film/Video Production Specialization awarded through Houston Community College

# **Required Course Sequence:**

Level 1: Principles of Arts, A/V Technology

**Level 2:** Graphic Design I OR Animation I OR Commercial Photography I OR Dual Credit TV Field Production (RTVB 1321) and Survey of the Motion Picture (FLMC 1311)

Level 3: Graphic Design II OR Animation II OR Commercial Photography II OR Dual Credit: Scriptwriting (RTVB 1329) AND Audio Production I (RTVB 1309) AND Film and Video Editing (RTVB 2330) AND TV Production Workshop (RTVB 2337)

Level 4: Practicum Graphic Design and Illustration OR Practicum Animation OR Practicum Commercial Photography OR Dual Credit Production Management (FLMC 1300) AND Advanced Film AND Video Editing (FLMC 2344)

Principles of Ar	ts, A/V Technology: 1956/9655	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

Careers in the Arts, Audio/Video Technology, and Communications career cluster require, in addition to creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication. Within this context, students will be expected to develop an understanding of the

various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

Graphic Design	and Illustration I: 2942/9656	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of AAVT			

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing 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 industry with a focus on fundamental elements and principles of visual art and design.

Graphic Design	and Illustration II: 9654	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of AAVT			
	Graphic Design and Illustration I			

Careers in graphic design and illustration span all aspects of the advertising and visual communications industry. 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 a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

Graphic Design and Illustration Practicum: 9570		Semesters: 2	Credits: 2	Grade: 12
Prerequisite:	Principles of AAVT			
	Graphic Design and Illustration I			
	Graphic Design and Illustration II			

Practicum instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations. **This course requires two class periods.** 

Animation I: 29	943/9699	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of AAVT			

Careers in animation span all aspects of motion graphics. 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 history and techniques of the animation industry.

Animation II: 9	592	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of AAVT			
	Animation I			

Careers in animation span all aspects of motion graphics. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster,

students will be expected to create two- and three-dimensional animations. The instruction also assists students seeking careers in the animation industry.

Animation Prac	ticum: 9569	Semesters: 2	Credits: 2	Grade: 12
Prerequisite:	Principles of AAVT			
	Animation I			
	Animation II			

Practicum instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations. **This course requires two class periods.** 

Commercial Pho	otography I: 2944/9695	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of AAVT			

Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. Within this context, in addition to developing 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 commercial photography industry with a focus on creating quality photographs.

Commercial Ph	otography II: 9591	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of AAVT			
	Commercial Photography I			

Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs

Commercial Pho	otography Practicum: 9568	Semesters: 2	Credits: 2	Grade: 12
Prerequisite:	Principles of AAVT			
	Commercial Photography I			
	Commercial Photography II			

Practicum instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations. **This course requires two class periods.** 

Student must follow HCC enrollment guidelines and procedures to enroll in Dual Credit Film/Video Production Classes.

TV Field Production – RTVB 1321: 2960/9595Semesters: 1Credits: .5College Credits: 3Grade: 10-12Prerequisite:Principles of AAVT

Pre-production, production, and post-production process involved in field television production. Topics include field camera setup and operation, field audio, television directing, and in-camera or basic continuity editing with an emphasis on underlying principles of video technology

Motion Pictures – FLMC 1311: 2961/9596 Semesters: 1 Credits: .5 College Credits: 3 Grade: 10-12 Prerequisite: Principles of AAVT RTVB 1321

Overview of film History, Civilization, and techniques including introduction to cinematic elements and approaches to analysis and criticism.

Scriptwriting – RTVB 1329: 9601 Semesters: 1 Credits: .5 College Credits: 3 Grade: 11-12 Prerequisite: Principles of AAVT RTVB 1321 FLMC 1311

Writing scripts for film and electronic media. Emphasizes format and style for commercials, public service announcements, promos, news, and documentaries. **MUST BE TAKEN CONCURRENTLY WITH RTVB 1309 AUDIO PRODUCTION I** 

Audio Production I – RTVB 1309: 9701 Semesters: 1 Credits: .5 College Credits: 3 Grade: 11-12 Prerequisite: Principles of AAVT RTVB 1321 FLMC 1311

Concepts and techniques of sound production including basic recording, mixing, and editing techniques. **MUST BE TAKEN CONCURRENTLY WITH RTVB 1329 SCRIPTWRITING** 

Film and Video Editing – RTVB 2330: 9678 Semesters: 1 Credits: .5 College Credits: 3 Grade:11-12 Prerequisite: Principles of AAVT RTVB 1321 FLMC 1311

Film and broadcast editing for the preparation and completion of shorts, trailers, documentaries, and features. **MUST BE TAKEN CONCURRENTLY WITH RTVB 2337 TV PRODUCTION WORKSHOP.** 

 TV Production Workshop – RTVB 2337: 9718
 Semesters: 1
 Credits: .5
 College Credits: 3
 Grade: 11-12

 Prerequisite:
 Principles of AAVT
 RTVB 1321
 FLMC 1311

A study of advanced application and design of video productions in location or studio shoots. This course provides information necessary to understand the production of professional video recordings. Basic camera, lighting, and recording skills will be introduced and reinforced with hands---on training. Students are required to attend additional lab hours outside of class. **MUST BE TAKEN CONCURRENTLY WITH RTVB 2330 FILM AND VIDEO EDITING.** 

Production Management – FLMC 1300: 9719 Semesters: 1 Credits: 1 College Credits: 3 Grade: 12 Prerequisite: Principles of AAVT RTVB 1321 FLMC 1311 RTVB 1329/1309 RTVB 2330/2337

Managing above- and below-the-line film or video production costs. Emphasizes analysis of scripts and treatments to determine production costs, crewing requirements, location needs, equipment rentals, and associated production costs. **This course requires two class periods.** 

Adv. Film/Video Editing – FLMC 2344: 9720 Semesters: 1 Credits: 1 College Credit: 3 Grade: 12 Prerequisite: Principles of AAVT RTVB 1321 FLMC 1311 RTVB 1329/1309 RTVB 2330/2337

Exploration of the creative possibilities of non-linear film and video editing. Includes editing aesthetics, titles, graphic design, compositing, and special effects. **This course requires two class periods.** 



### PROGRAM OF STUDY

The Business Management/Administration program of study teaches 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

Page 56 of 78

resources. This program of study will also introduce students to mathematical modeling tools and organizational evaluation methods.

Level I Certificate – Microsoft Office Technology Specialization awarded through Houston Community College

# Required Course Sequence:

Level 1: Principles of Business Marketing and Finance

Level 2: Banking and Financial Services and Virtual Business OR Business Law OR Dual Credit Computer Application I POFI 1301 and Dual Credit Basic Keyboarding POFI 1329

Level 3: Global Business and Human Resources Management OR Business Management OR Dual Credit Computer Applications II POFI 1341, Dual Credit Business Math POFI 1325 Dual Credit Spreadsheets POFI 1349 and Dual Credit Desktop Publishing POFI 2331

Level 4: Statistics and Business Decision Making OR Practicum in Business OR Dual Credit Computer Applications II POFI 1341, Dual Credit Business Math POFI 1325 Dual Credit Spreadsheets POFI 1349 and Dual Credit Desktop Publishing POFI 2331

Principles of Business, Marketing and Finance: 1958Semesters: 2Credits: 1Grade: 9-12Prerequisite:None

This course allows students to gain knowledge and skills in economics, private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

Banking and Financial Services: 2958Semesters: 1Credits: .5Grade: 10-11Prerequisite:Principles of Business, Marketing and Finance

Banking services are primarily concerned with accepting deposits, lending funds, and extending credit. Banking services include cash management, short-term investments, mortgages and other loans, credit cards, and bill payment. Banking services are delivered via a number of different institutions, from commercial banks (the largest group) and other traditional means (savings and loans associations, credit unions, and local banks) to newer ventures through insurance companies, brokerage houses, and the Internet.

Virtual Business: 2967/9602Semesters: 1Credits: .5Grade:10-11Prerequisite:Principles of Business, Marketing and Finance

Virtual Business is designed for students to start a virtual business by creating a web presence, conducting online and off-line marketing, examining contracts appropriate for an online business, and demonstrating project-management skills. Students will also demonstrate bookkeeping skills for a virtual business, maintain business records, and understand legal issues associated with a virtual business.

Business Law: 2951/9613Semesters: 2Credits: 1Grade: 10-12Prerequisite:Principles of Business, Marketing and Finance OR Principles of Law, Public Safety, Corrections and<br/>Security

Business Law is designed for students to analyze various aspects of the legal environment, including ethics, the judicial system, contracts, personal property, sales, negotiable instruments, agency and employment, business organization, risk management, and real property.

Global Business:9608Semesters:1Credits:.5Grade:11-12Prerequisite:Principles of Business, Marketing and Finance<br/>Banking and Financial Services/Virtual Business OR Business LawBanking and Financial Services/Virtual Business OR Business LawBanking and Financial Services/Virtual Business OR Business Law

Global Business is designed for students to analyze global trade theories, international monetary systems, trade policies, politics, and laws relating to global business as well as cultural issues, logistics, and international human resource management.

Human Resource Management: 9614Semesters: 1Credits: .5Grade: 10-12Prerequisite:Principles of Business, Marketing and Finance

Students recognize, evaluate, and prepare for a rapidly evolving global business environment that requires flexibility and adaptability. Students analyze the primary functions of human resources management, which include recruitment, selection, training, development, and compensation.

Business Management:9616Semesters:2Credits:1Grade:11-12Prerequisite:Principles of Business, Marketing and Finance<br/>Banking and Financial Services/Virtual Business OR Business LawGrade:11-12

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

Statistics and Business Decision Making: 2959Semesters: 2Credits: 1Grade: 11-12Prerequisite:Principles of Business, Marketing and Finance<br/>Banking and Financial Services/Virtual Business OR Business Law<br/>Global Business and Human Resources Management OR Business ManagementGrade: 11-12

Statistics and Business Decision Making is an introduction to statistics and the application of statistics to business decision making. Students will use statistics to make business decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid.

 Practicum in Business Management I: 9619
 Semesters: 2
 Credits: 3

 Prerequisite:
 Principles of Business, Marketing and Finance

 Human Resources Management and Touch Systems Data Entry

 Money Matters or Virtual Business/Global Business

Students will learn advanced technology skills required in the business environment. Topics addressed include workplace technology standards in application of word processing, spreadsheets, databases, telecommunications, desktop publishing, presentation management, networking, operating systems, and emerging technologies. The teacher may add the workplace competencies to the course content. This course requires three class periods and student must have off-campus employment.

Grade: 12

# Student must follow HCC enrollment guidelines and procedures to enroll in Dual Credit Business Classes.

Computer Applications I – POFI 1301: 2962/9603Semesters: 1Credits: .5College Credits: 3Grade: 11-12Prerequisite:Principles of Business, Marketing and Finance<br/>Human Resources Management and Touch Systems Data EntryHuman Resources Management and Touch Systems Data Entry

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

Basic Keyboarding – POFIT 1329: 2963/9712Semesters: 1Credits: .5College Credits: 3Grade: 11-12Prerequisite:Principles of Business, Marketing and Finance<br/>Human Resources Management and Touch Systems Data EntryHuman Resources Management and Touch Systems Data Entry

Skill development in the operation of the keyboard by touch and applying proper keyboarding techniques. Emphasis is on the development of acceptable speed, accuracy levels, and formatting basic documents.

Computer Applications II – POFI 1341: 9713 Semesters: 1 Credits: .5 College Credits: 3 Grade: 11-12 Prerequisite: POFI 1301 POFIT 1329

Continued study of current computer terminology and technology. Advanced skill development in computer hardware, software applications, and procedures. The student will demonstrate proficiency in commonly used software applications and identify and explain the concepts involved in producing documents using advanced features of software applications. Emphasis is on developing end-user proficiency skills for office environments. **MUST BE TAKEN CONCURRENTLY WITH BUSINESS MATH POFT 1325.** 

Business Math – POFIT 1325: 9714 Prerequisite: POFI 1301 POFIT 1329 Semesters: 1 Credits: .5 College Credits: 3 Grade: 11-12

College Credits: 3

Grade: 12

Skill development in the use of electronic calculators and business mathematical functions. Emphasis on business problem-solving skills using spreadsheet software and/or electronic calculator/keyboard. **MUST BE TAKEN CONCURRENTLY WITH COMPUTER APPLICATIONS II POFI 1341.** 

Spreadsheets -	- POFI 1349: 9715	Semesters: 1	Credits: .5	College Credits: 3	Grade: 12
Prerequisite:	POFI 1301				
	POFIT 1329				
	POFI 1341				
	POFIT 1325				

Skill development in the use of a spreadsheet software package. Topics include worksheet creation and manipulation functions, templates, macro programming data-base functions, data-table features, and graphics. The student will identify spreadsheet terminology and concepts; perform shortcut functions; modify worksheets; and insert graphics in worksheets. Study of computer applications from business productivity software suites. Emphasis is on developing end-user proficiency skills for office environments. **MUST BE TAKEN CONCURRENTLY WITH DESKTOP PUBLISHING POFI 2331.** 

Desktop Publishing – POFI 2331: 9716 Prerequisite: POFI 1301 POFIT 1329 POFI 1341 POFIT 1325

In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques graphics, multiple page displays, and business applications. **MUST BE TAKEN CONCURRENTLY WITH SPREADSHEETS POFI 1349.** 



PROGRAM OF STUDY

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 students to a wide variety of

Page **60** of **78** 

student groups and their corresponding needs. It familiarizes them with the processes for developing curriculum, coordinating educational content, and coaching groups and individuals.

# **Required Course Sequence:**

- Level 1: Principles of Education and Training
- Level 2: Human Growth and Development
- Level 3: Instructional Practices in Education
- Level 4: Practicum in Education and Training

Principles of Ed	ucation and Training: 1964	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

This course is designed to introduce students to the various careers available within the education and training career cluster. Students will also gain an understanding of the basic knowledge and skills essential to careers within the cluster.

Human Growth	and Development: 1998/9635	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of Education and Training			

This course addresses knowledge and skills related to child growth and development from prenatal through school-age, 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 Pr	ractices in Education: 9636	Semesters: 2	Credits: 2	Grade: 11-12
Prerequisite:	Principles of Education and Training			
	Human Growth and Development			

Instructional Practices in Education and Training is a field-based internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators or trainers in direct instructional roles with elementary school, 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. **This course requires two class periods.** 

Practicum in Ed	ucation and Training: 9637	Semesters: 2	Credits: 2	Grade: 12
Prerequisite:	Principles of Education and Training			
	Human Growth and Development			
	Instructional Practices in Education			

The Practicum in Education is a field-based internship that provides students with background knowledge of child and adolescent development principles of effective teaching and training practices. **This course requires two class periods.** 



### **PROGRAM OF STUDY**

The Health Science/Healthcare Diagnostics program of study introduces students to occupations and educational opportunities related 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 ultrasound technology.

### **Required Course Sequence:**

Level 1:	Principles of Health Science
Level 2:	Health Science Theory and Human Growth and Development
Level 3:	Medical Terminology
Level 4:	World Health Research AND/OR Anatomy and Physiology of the Human Systems OR Practicum in Health
Science	

Principles of Hea	alth Science: 1955	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

This course provides an overview of the therapeutic, diagnostic, health informatics, support services and biotechnology research and development systems of the health care industry. Students will realize that quality health care depends on the ability to work well with others, and that professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities.

Health Science	Theory: 1995/9664	Semesters: 2	Credits: 1	Grade:10-12
Prerequisite:	Principles of Health Science			

This course is designed to provide the development of advanced knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences for continued knowledge and skill development.

Human Growt	n and Development: 1998/9635	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of Education and Training	OR Principles of Healt	h Science	

This course addresses knowledge and skills related to child growth and development from prenatal through school-age, 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. Can be concurrently taken with Health Science Theory

Medical Termi	nology: 9585	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of Health Science			
	Health Science Theory			

This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations, and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

Anatomy & Phy	ysiology of Human Systems: 9312	Semesters: 2	Credits: 1	Grade: 12
Prerequisite:	Completion of three years of high school	l science course work		
Principles of Health Science				
	Health Science Theory			
	Medical Terminology			

This course is designed to introduce students to the structure and function of the human body. The gross anatomy on the organism level, microanatomy on the cellular level, and the physiological functioning of organ systems will be emphasized. Maintenance of homeostasis and the causes of disease will be studied. Limited organ and animal dissections as well as microscopic and physiological studies will be performed. Students will be expected to conduct themselves appropriately in the laboratory.

World Health R	esearch: 9566	Semesters: 2	Credits: 1	Grade:12
Prerequisites:	Principles of Health Science			
	Health Science Theory			
	Medical Terminology			

The World Health Research course is designed to examine major world health problems and emerging technologies as solutions to these medical concerns. It is designed to improve students' understanding of the cultural, infrastructural, political, educational, and technological constraints and inspire ideas for appropriate technological solutions to global medical care issues.

Practicum in He	ealth Science I: 1955/9885	Semesters: 2	Credits: 1	Grade:11
Prerequisites:	Principles of Health Science			
	Health Science Theory			
	Medical Terminology			
	Instructor Approval			

This course is designed to equip students with the knowledge, technical skills, and work habits required for an entrylevel position in a Health Professional setting by offering problem-solving exercises, by utilizing real-world scenarios. This course places a strong emphasis on ethics, accountability, professionalism, and the individuals' commitment to the pursuit of lifelong personal, educational, and professional development, as it relates to the Health Science field. Semesters: 2

Credits: 1

Grade:12

Practicum in Health Science II: 9857 Prerequisites: Principles of Health Science Health Science Theory Medical Terminology Practicum in Health Science I Instructor Approval

This course is designed to equip students with knowledge, technical skills, and work habits required for an entry-level position in a Health Science related area. This course encourages active student participation and may include group discussions and projects, laboratory work, simulations, demonstrations, field trips, guest speakers, and lectures. A strong emphasis is placed on ethics, accountability, professionalism, and the individual's commitment to pursue lifelong personal and professional development.



# **CULINARY ARTS**

# **PROGRAM OF STUDY**

The Culinary Arts program of study introduces student 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.

Level I Certification – Prep Cook/Cook I awarded through Houston Community College

# **Required Course Sequence:**

Level 1: Principles of Hospitality and Tourism

Level 2:Dual Credit Purchasing of Hospitality Operations RSTO 1325 and Dual Credit Basic Food PreparationCHEF 1301

Level 3: Dual Credit Intermediate Food Preparation CHEF 2201 and Dual Credit Advanced Food Preparation CHEF 2231 Hospitality Services can be taken in addition with Instructor Approval

Level 4: Dual Credit Introduction to Hospitality HAMG 1321 and Dual Credit Fundamentals of Baking PSTR 1301, Hospitality Services can be taken in addition with Instructor Approval

Principles of Hospitality and Tourism: 1960 Prerequisite: None Semesters: 2

Credits: 1

Students will learn about local and regional tourism issues, develop a career portfolio, and introduce the basics of cooking.

Purchasing for Hospitality Operations RSTO 1325: 2946 Semesters: 1 Credits: 1 College Credits: 3 Grade: 10-12 Prerequisite: Principles of Hospitality and Tourism

Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparison, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yield, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. **This course requires two class periods.** 

Basic Food Prep – CHEF 1301: 2964/9582Semesters: 1Credits:1 College Credit: 3Grade: 10-12Prerequisite:Principles of Hospitality and Tourism

A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. **This course requires two class periods.** 

Intermediate Food Prep – CHEF 2201: 9581 Semesters: 1 Credits: 1 College Credits: 3 Grade: 11-12 Prerequisite: Principles of Hospitality and Tourism RSTO 1325 CHEF 1301

Continuation of previous food preparation course. Topics include the concept of precooked food items, as well as scratch preparation. Covers full range of food preparation techniques. **This course requires two class periods.** 

Advanced Food Prep – CHEF 2231: 9511 Semesters: 1 Credits: 1 College Credits: 3 Grade: 11-12 Prerequisite: Principles of Hospitality and Tourism RSTO 1325 CHEF 1301

Topics include the concept of pre-cooked food items and the preparation of canapés, hors d'oeuvres, and breakfast items. **This course requires two class periods.** 

Introduction to Hospitality – HAMG 1321: 9863 Semesters: 1 Credits: 1 College Credits: 3 Grade: 12 Prerequisite: Principles of Hospitality and Tourism RSTO 1325 CHEF 1301 CHEF 2201 CHEF 2231

An overview of the hospitality industry including the organizational structure within the lodging and food service establishments in which various career opportunities are outlined. **This course requires two class periods.** 

 Fundamentals of Baking – PSTR 1301: 9864
 Semesters: 1
 Credits: 1
 College Credits: 3
 Grade: 12

 Prerequisite:
 Principles of Hospitality and Tourism
 RSTO 1325
 CHEF 1301
 CHEF 2201

 CHEF 2201
 CHEF 2231
 CHEF 2231
 CHEF 2231
 Chef 2231

Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. **This course requires two class periods.** 

Hospitality Ser	vices: 9521	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Instructor Approval Required and must be a	active in SkillsUSA		
Princip	ples of Hospitality and Tourism			
	RSTO 1325			
	CHEF 1301			
	CHEF 2201			
	CHEF 2231			

Hospitality Services provides students with the academic and technical preparation to pursue high-demand and high-skill careers in hospitality related industries. The knowledge and skills are acquired within a sequential, standards-based program that integrates hands-on and project-based instruction. Standards included in the Hospitality Services course are designed to prepare students for nationally recognized industry certifications, postsecondary education, and entry-level careers. In addition, Hospitality Services is designed so that performance standards meet employer expectations, enhancing the employability of students.



## WEB DEVELOPMENT

### PROGRAM OF STUDY

The Information Technology/Web Development program of study explores 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 designated to facilitate the creation of web and multimedia content.

### **Required Course Sequence:**

Level 1:	Principles of Information Technology
Level 2:	Web Technologies OR Digital Media
Level 3: 1425	Dual Credit Introduction to Computers ITSC 1301 and Dual Credit Personal Computer Hardware ITSC
Level 4:	Computer Programming II OR Computer Science II OR Practicum in Information Technology

Principles of Information Technology: 1965Semesters: 2Credits: 1Grade: 9-12Prerequisite:None

This course allows students to develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. Students will identify various employment opportunities available in the information technology field, demonstrate knowledge of the hardware components associated with information systems, demonstrate knowledge of the different software associated with information systems, and analyze network systems.

Web Technologies: 2947/9652Semesters: 2Credits: 1Grade: 10-12Prerequisite:Principles of Information TechnologyFraction Content of Content of

Web Technologies provides the student the opportunity to develop and maintain SMSD's website. Students will study copyright and ethical issues, the hardware and software of networks, the Internet and the intranet, website design, web commerce, HTML, and JavaScript. Also, students will develop and design web presentations for various school departments and organizations.

Digital Media: 2948/9653 Prerequisite: Principles of Information Technology Semesters: 2

Students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and solve a problem.

# Student must follow HCC enrollment guidelines and procedures to enroll in Dual Credit Computer Science Courses.

Introduction to Computers: ITSC 1301: 2949Semesters: 1Credits: .5College Credit: 3Grade: 11-12Prerequisite:Principles of Information Technology<br/>Web Technologies OR Digital MediaWeb Technologies OR Digital MediaSemesters: 1Credits: .5College Credit: 3Grade: 11-12

Students acquire principles of computer maintenance, including electronic and electrical theory, computer hardware principles, and broad level components related to the installation, diagnosis, service, and repair of computer systems

Personal Comp	uter Hardware: ITSC 1425: 2950	Semesters: 1	Credits: .5	College Credit: 3	Grade: 11-12
Prerequisite:	Principles of Information Technology				
	Web Technologies OR Digital Media				

Students acquire principles of computer maintenance, including electronic and electrical theory, computer hardware principles, and broad level components related to the installation, diagnosis, service, and repair of computer systems. Current personal computer hardware including assembly, upgrading, setup, configuration, and troubleshooting

Computer Programming II: 9671		Semesters: 2	Credits: 1	Grade: 12
Prerequisite:	Principles of Information Technology			
	Web Technologies or Digital Media			

In Computer Programming II, students will expand their knowledge and skills in structured programming techniques and concepts by addressing more complex problems and developing comprehensive programming solutions. Students will analyze the social responsibility of business and industry regarding the significant issues relating to environment, ethics, health, safety, and diversity in society and in the workplace as related to computer programming. Students will apply technical skills to address business applications of emerging technologies.

Computer Scie	nce II: 9556	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of Information Technology Web Technologies or Digital Media 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. 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.

Page **68** of **78** 



## PROGRAM OF STUDY

The Legal Studies program of study introduces student to the occupations and educational opportunities related to representing clients in criminal and civil litigation and other legal proceedings, as well as assisting lawyers and preparing legal documents. This program of study explores possible specializations in a single area of law.

#### Required Course Sequence:

- Level 1: Principles of Law, Public Safety, Corrections and Security
- Level 2: Court Systems And/Or Business Law Both Recommended
- Level 3: Legal Research And Forensic Science Both Recommended
- Level 4: Criminal Investigations And Forensic Both Science Recommended

Prin. of Law, Pub. Safety, Corrections and Sec.: 1961Semesters: 2Credits: 1Grade: 9-12Prerequisite:None

This course provides students with an overview of the skills necessary for careers in law enforcement, fire services, security, and corrections. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services.

Business Law:	2951/9613	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of Law, Public Safety, Cor	rections and Security		

Business Law is designed for students to analyze various aspects of the legal environment, including ethics, the judicial system, contracts, personal property, sales, negotiable instruments, agency and employment, business organization, risk management, and real property.

Court Systems and Practices:1952/9697Semesters:2Credits:1Grade:10-12Prerequisite:Principles of Law, Public Safety, Corrections and SecurityFrade:10-1210-12

Court Systems and Practices is an overview of the federal and state court systems. The course identifies the roles of judicial officers and the trial processes from pretrial to sentencing and examines the types and rules of evidence. Emphasis is placed on constitutional laws for criminal procedures such as search and seizure, stop and frisk, and interrogation

Legal Research	: 9705	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of Law, Public Safety, Correc Court Systems	tions and Security		

The overall academic objectives of the course are to develop the student's analytical legal research skills and to increase the student's judicial opinion reading comprehension. Students will learn how to use the law library, electronic resources and a range of other tools to analyze relevant primary and secondary law.

Criminal Investigations: 9564	Semesters: 2	Credits: 1	Grade: 12
Prerequisite: Principles of Law, Public Safety, Corr	ections and Security		
Court Systems			
Legal Research			

Criminal Investigation is a course that introduces students to the profession of criminal investigations. Students will understand basic functions of criminal investigations and procedures and will learn how to investigate or follow up during investigations. Students will learn terminology and investigative procedures related to criminal investigation, crime scene processing, evidence collection, fingerprinting, and courtroom presentation. Through case studies and simulated crime scenes, students will collect and analyze evidence such as fingerprint analysis, bodily fluids, hairs, fibers, shoe and tire impressions, bite marks, drugs, tool marks, firearms and ammunition, blood spatter, digital evidence, and other types of evidence.

Forensic Science	e: 9319	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Biology and Chemistry			

NOTE: To receive credit in science, students must meet the 40% laboratory and fieldwork requirement identified in §74.3(b) (2) (C) of the Texas Education Code

This course is designed to challenge students with topics such as fingerprinting, DNA analysis, blood typing and spattering, trajectories (for ballistics as well as blood spattering) comparative anatomy, and chemical analysis of drugs, poisons, and trace evidence, and the dynamics of Physics.



### WELDING

### **PROGRAM OF STUDY**

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 and plastic. Student 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.

Level I Certificate – Structural Welding Specialization awarded through Houston Community College

### **Required Course Sequence:**

Level 1:Principles of ManufacturingLevel 2:Dual Credit WLDG 1407 Introduction to Welding Using Multiple Processes and Dual Credit WLDG 1428Introduction to Shield Metal Arc WeldingDual Credit WLDG 1430 Introduction to Gas Metal Arc Welding and WLDG 1413 Introduction toBlueprintsDual Credit WLDG 1457 Intermediate Shielded Metal Arc Welding and Dual Credit WLDG 2447 AdvancedGas Metal Arc Welding

Principles of M	lanufacturing: 1962	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

This course allows students to gain knowledge and skills in the application design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. Knowledge and skills in the proper application of principles of manufacturing, the design of technology, the efficient production of technology, and the assessment of the effects of manufacturing production technology prepare students for success in the modern world. Students will explore career opportunities, describe how a systems model can be used to describe manufacturing and technological activities, apply manufacturing concepts to specific problems and investigate emerging and innovative applications of technology in engineering.

### Students must follow HCC enrollment guidelines and procedures to enroll in Dual Credit Welding classes.

Introduction to Welding – WLDG 1407: 2965/9721Semesters: 1Credits: 1College Credits: 3 Grade: 10-12Prerequisite:Principles of Manufacturing

Basic welding processes. Includes oxy-fuel welding (OFW) and cutting, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), and gas tungsten arc welding (GTAW). This course requires two class periods.

Page **71** of **78** 

Shield Metal Arc Welding – WLDG 1428: 2966/9730Semesters: 1Credits: 1College Credits: 3Grade: 10-12Prerequisite:Principles of Manufacturing

An introduction to the shielded metal arc welding process. Emphasis placed on power sources, electrode selection, and various joint designs. **This course requires two class periods.** 

Gas Metal Arc Welding – WLDG 1430: 9790 Semesters: 1 Credits: 1 College Credits: 3 Grade: 11-12 Prerequisite: Principles of Manufacturing WLDG 1407 WLDG 1428

A study of the principles of gas metal arc welding, setup and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools/equipment. Instruction in various joint designs. **This course requires two class periods.** 

Intro to Blueprints – WLDG 1413: 9798 Semesters: 1 Credits: 1 College Credits: 3 Grade: 11-12 Prerequisite: Principles of Manufacturing WLDG 1407 WLDG 1428

A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production. **This course requires two class periods.** 

Inter. Shielded Welding – WLDG 1457: 9799 Semesters: 1 Credits: 1 College Credits: 3 Grade: 12 Prerequisite: Principles of Manufacturing WLDG 1407 WLDG 1428 WLDG 1430 WLDG 1413

A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Identify principles of arc welding; describe arc welding operations of fillet and groove joints; explain heat treatments of low alloy steels; and explain weld size and profiles. Prepare test plates; perform fillet welds in the overhead position; perform air carbon arc weld removal; perform bevel groove welds with backing plates in various positions; and demonstrate use of tools and equipment. **This course requires two class periods.**  

 Adv. Gas Welding – WLDG 2447: 9854
 Semesters: 1
 Credits: 1
 College Credits: 3
 Grade: 12

 Prerequisite:
 Principles of Manufacturing
 WLDG 1407

 WLDG 1428
 WLDG 1430

 WLDG 1413

Advanced topics in Gas Metal Arc Welding (GMAW). Includes welding in various positions and directions. This course requires two class periods.



### PROGRAM OF STUDY

The Marketing and Sales program of study teaches students how to collect information to determine potential sale of a product or service and/or create a marketing campaign to market or distribute goods and services. Through this program of study, students will learn the skills necessary to understand and apply data on customer demographics, preferences, needs and buying habits.

**Required Course Sequence:** 

- Level 1: Principles of Business Marketing and Finance
- Level 2: Sports and Entertainment Marketing AND Social Media Marketing OR Advertising
- Level 3: Entrepreneurship
- Level 4: Advanced Marketing OR Practicum in Marketing

Principles of Business, Marketing and Finance: 1958 Semesters: 2 Credits: 1 Grade: 9-12 Prerequisite: None

This course allows students to gain knowledge and skills in economics, private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

Sports and Entertainment Marketing: 2 Prerequisite: Principles of Business, N		Credits: .5	Grade: 10-12
This course provides students with a the sports and sporting events and entertain segmentation, sponsorship, event mark entertainment marketing plans. This cou sponsorship proposals, endorsement co management techniques.	nment. Students will learn about bas eting, promotions, sponsorship prop urse will also provide students an op	ic marketing, target m osals, and implementa portunity to develop p	arketing and ition of sports and romotional plans,
Social Media Marketing: 2953/9623 Prerequisite: Principles of Business, N	Semesters: 1 Narketing, and Finance	Credits: .5	Grade: 10-12
Social Media Marketing is designed to lo tools in their overall marketing strategy the new world of social media. Students techniques for gaining customer and co platforms to engage consumers and mo	. The course will investigate how the s will manage a successful social med nsumer buy-in to achieve marketing	marketing community ia presence for an orga goals, and properly se	measures success in anization, understand
Advertising: 2954/9621 Prerequisite: Principles of Business, N	Semesters: 1 Marketing, and Finance	Credits: .5	Grade: 10-12
This course introduces students to the p and legal issues of advertising, historica marketing communications. Students w broadcast, and digital media.	l influences, strategies, and media de	ecision processes as we	ell as integrated
Entrepreneurship: 9622 Prerequisite: Principles of Business, N Sports & Entertainment	Semesters: 2 Marketing, and Finance Marketing or Social Media Marketin	Credits: 1 g or Advertising	Grade: 11-12
This course allows students to learn the course is to help students understand th determining feasibility of an idea using products and services. Students will also for profit.	ne process of analyzing a business op research, and developing a plan to or	portunity, preparing a ganize and promote the	business plan, ne business and its
Advanced Marketing: 9563 Prerequisite: Principles of Business, N Sports & Entertainment Entrepreneurship	Semesters: 2 Marketing, and Finance Marketing or Social Media Marketin	Credits: 2 ng or Advertising	Grade: 12
This course provides students with the or more of the marketing functional areas			

pricing, product planning, promotion, purchasing, risk management, and selling skills. This course requires two class periods.

Practicum Marketing Dynamics: 9617Semesters: 2Credits: 2Grade: 12Prerequisite:Principles of Business, Marketing, and Finance<br/>Sports & Entertainment Marketing or Social Media Marketing or Advertising<br/>EntrepreneurshipGrade: 12

This course allows students to gain knowledge and skills about technology, communication, and customer-service skills. This practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of expertise. **This course requires two class periods.** 



# PROGRAM OF STUDY

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

# **Required Course Sequence:**

- Level 1: Principles of Applied Engineering
- Level 2: Engineering Science
- Level 3: Engineering Design and Presentation I and Engineering Math
- Level 4: Engineering Design and Problem Solving and Engineering Math

Principles of Ap	oplied Engineering: 1957	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

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 understand the various fields of engineering and will be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

Engineering Scie	ence: 2955/9661	Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of Applied Engineering			

Engineering Science is an engineering course designed to expose students to some of the major concepts and technologies that they will encounter in a postsecondary program of study in any engineering domain. Students will have an opportunity to investigate engineering and high-tech careers. In Engineering Science, students will employ science, technology, engineering, and mathematical concepts in the solution of real-world challenge situations. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

Engineering Des	sign and Presentation I: 9560	Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Principles of Applied Engineering			
	Engineering Science			

Engineering Design and Presentation I is a continuation of knowledge and skills learned in Principles of Applied Engineering. Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.

Engineering Mathematics: 9559		Semesters: 2	Credits: 1	Grade: 11-12
Prerequisite:	Algebra II			

Engineering Mathematics is a course where students solve and model design problems. Students will use a variety of mathematical methods and models to represent and analyze problems that represent a range of real-world engineering applications such as robotics, data acquisition, spatial applications, electrical measurement, manufacturing processes, materials engineering, mechanical drives, pneumatics, process control systems, quality control, and computer programming. Students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Can be concurrently taken with a third or fourth coherent sequence Engineering course

Engineering Design and Problem Solving: 9575		Semesters: 2	Credits: 1	Grade: 12
Prerequisite:	Principles of Applied Engineering			
	Engineering Science			
	Engineering Design and Presentation,	l		

The Engineering Design and Problem-Solving course is the creative process of solving problems by identifying needs and then devising solutions. The solution may be a product, technique, structure, or process depending on the problem. Science aims to understand the natural world, while engineering seeks to shape this world to meet human needs and wants. Engineering design takes into consideration limiting factors or "design under constraint." Various engineering

disciplines address a broad spectrum of design problems using specific concepts from the sciences and mathematics to derive a solution. The design process and problem solving are inherent to all engineering disciplines.



## PROGRAM OF STUDY

The Automotive program of study teaches students how to repair and refinish automobiles and service various types of vehicles. Students may learn to collect payment for services or supplies and perform typical vehicle maintenance procedures such as lubrication, oil changes, installation of antifreeze or replacement of accessories like wiper blades or tires.

### **Required Course Sequence:**

- Level 1: Principles of Transportation Systems
- Level 2: Automotive Basic
- Level 3: Automotive Technology I: Maintenance and Light Repair
- Level 4: Automotive Technology II: Automotive Service

Principles of Tr	ansportation Systems: 1966	Semesters: 2	Credits: 1	Grade: 9-12
Prerequisite:	None			

In Principles of Transportation Systems, students will gain knowledge and skills in the safe application, design, production, and assessment of products, services, and systems. This knowledge includes the history, laws and regulations, and common practices used in the transportation industry. Students should apply knowledge and skills in the application, design, and production of technology as it relates to the transportation industries. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings.

Automotive Basics: 2956/9684		Semesters: 2	Credits: 1	Grade: 10-12
Prerequisite:	Principles of Transportation Systems			

Automotive Basics includes knowledge of the basic major automotive systems and the theory and principles of the components that make up each system and how-to service [diagnosing and serving] these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics students, will gain knowledge and skills in the repair, maintenance, and servicing/diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability

Auto Tech I – N	Aaintenance and Light Repair: 9682	Semesters: 2	Credits: 2	Grade: 11-12
Prerequisite:	Principles of Transportation and Autom	notive Basics		
	Automotive Basics			

This course allows students to learn about automotive services including knowledge about the function of the major automotive systems and the principles of diagnosing and servicing these systems. Students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices. **This course requires two class periods.** 

 Auto Tech II – Automotive Service: 9683
 Semesters: 2
 Credits: 2
 Grade: 12

 Prerequisite:
 Principles of Transportation and Automotive Basics
 Automotive Basics
 Automotive Technology I Maintenance and Light Repair

Automotive Service includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. Automotive Technology II: Automotive Service includes applicable safety and environmental rules and regulations. In this course, students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability. **This course requires two class periods.**